

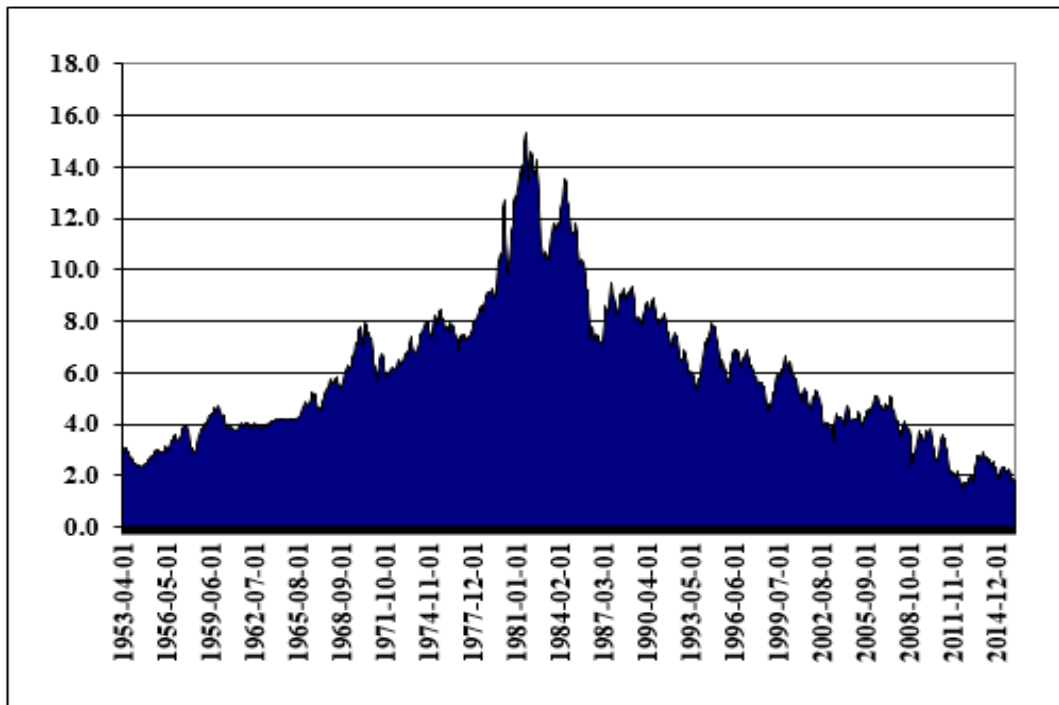
Exhibit JRW--1

Granite State Electric
Recommended Cost of Capital

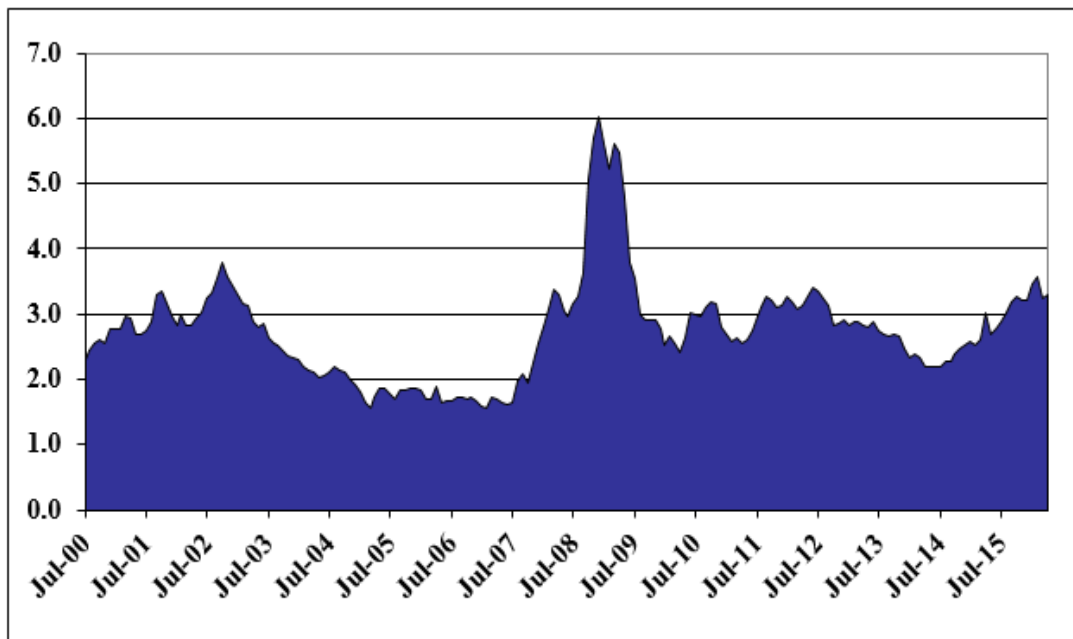
Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.00%	5.88%	2.94%
Common Equity	50.00%	8.85%	4.43%
Total	100.00%		7.37%

Exhibit JRW--2

Panel A
Ten-Year Treasury Yields
1953-Present



Panel B
Long-Term Moody's Baa Yields Minus Ten-Year Treasury Yields
2000-Present



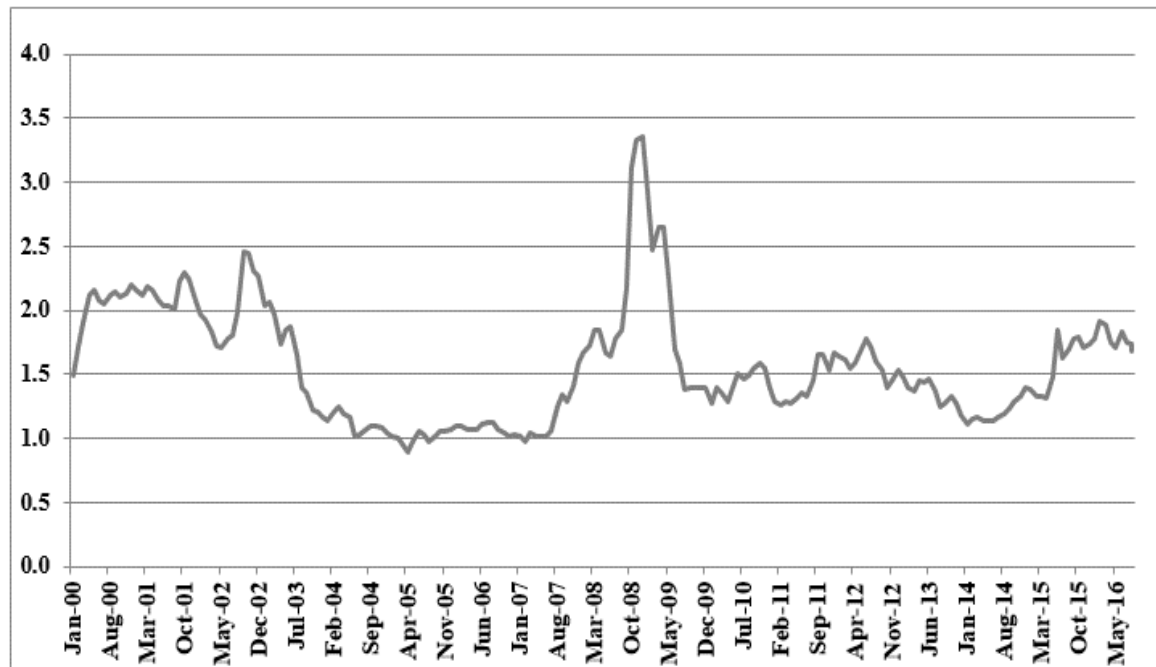
Source: Federal Reserve Bank of St. Louis, FRED Database.

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Exhibit JRW--3
Panel A
Long-Term, A-Rated Public Utility Yields



Panel B
Long-Term, A-Rated Public Utility Yields minus -Twenty-Year Treasury Yields



Source: Mergent Bond Record, Federal Reserve Bank of St. Louis, FRED Database.

Exhibit JRW--4

Granite State Electric
Summary Financial Statistics for Proxy GroupsPanel A
Electric Proxy Group

Company	Operating Revenue (\$mil)	Percent Elec Revenue	Percent Gas Revenue	Net Plant (\$mil)	Market Cap (\$mil)	S&P Issuer Credit Rating	Moody's Long Term Rating	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio	Return on Equity	Market to Book Ratio
ALLETE, Inc. (NYSE-ALE)	1,491.7	66		3,631.3	2.94	BBB+	A3	4.1	MN, WI	54.2	8.2	1.59
Alliant Energy Corporation (NYSE-LNT)	3,237.4	77	10	9,846.4	8.68	A-	A3	3.6	WI,IA,IL,MN	48.0	10.1	2.18
Ameren Corporation (NYSE-AEE)	6,002.0	86	19	19,324.0	12.09	BBB+	Baa1	3.8	IL,MO	46.5	9.2	1.75
American Electric Power Co. (NYSE-AEP)	15,983.8	82		47,436.2	32.29	BBB	Baa1	3.8	10 States	46.0	11.1	1.76
Avista Corporation (NYSE-AVA)	1,438.0	69	33	3,990.7	2.62	BBB	Baa1	3.5	WA,ID,AK	49.7	8.6	1.62
Black Hills Corporation (NYSE-BKH)	1,365.8	50	45	4,389.9	3.03	BBB	Baa1	3.4	NE,IA,CO,WY,AR,SD,MT	31.8	1.2	1.94
CMS Energy Corporation (NYSE-CMS)	6,167.0	69	26	15,187.0	11.80	BBB+	Baa2	2.8	MI	30.3	13.6	2.84
Consolidated Edison, Inc. (NYSE-ED)	12,100.0	71	14	32,600.0	22.82	A-	A3	3.7	NY,PA	47.8	8.6	1.64
Dominion Resources, Inc. (NYSE-D)	11,046.0	65	1	43,682.0	46.08	BBB+	Baa2	3.8	NC,OH,FL,SCKY	31.7	14.4	3.23
DTE Energy Company (NYSE-DTE)	9,913.0	50	13	18,295.0	16.81	BBB+	A3	3.4	MI	47.5	8.6	1.92
Duke Energy Corporation (NYSE-DUK)	22,911.0	91	2	77,329.0	55.42	A-	A3	3.0	NC,OH,FL,SCKY	47.2	6.6	1.39
Edison International (NYSE-EIX)	11,321.0	100		35,629.0	23.89	BBB+	A3	3.9	CA	44.3	7.8	2.07
El Paso Electric Company (NYSE-EE)	842.3	100		2,752.2	1.82	BBB	Baa1	2.3	TX,NM	42.3	7.4	1.80
Energy Corporation (NYSE-ETR)	10,952.3	82	1	29,069.7	13.83	BBB	Baa3	2.4	LA,AR,MS,TX	39.2	1.7	1.42
Eversource Energy (NYSE-ES)	7,447.2	89	11	20,448.5	17.60	A	Baa1	4.7	CT,NH,MA	50.3	8.4	1.67
FirstEnergy Corporation (ASE-FE)	14,934.0	71		37,461.0	13.78	BBB-	Baa3	2.2	OH,PA,NY,NJ,WV,MD	33.5	NM	1.21
IDACORP, Inc. (NYSE-IDA)	1,251.0	100		4,045.3	3.84	BBB	Baa1	3.5	ID	54.1	9.2	1.84
MGE Energy, Inc. (NYSE-MGEE)	540.9	76	24	1,266.8	1.92	AA-	A1	6.6	WI	64.4	10.6	2.72
NorthWestern Corporation (NYSE-NWE)	1,223.4	80	20	4,109.7	2.99	BBB	A3	2.5	MT,SD,NE	44.2	9.1	1.84
OGE Energy Corp. (NYSE-OGE)	2,151.4	100		7,469.9	6.01	A-	A3	4.0	OK,AR	53.3	7.2	1.81
Otter Tail Corporation (NDQ-OTTR)	798.5	52		1,428.6	1.30	BBB	A3	3.6	MN,ND,SD	51.6	9.8	2.04
PG&E Corporation (NYSE-PCG)	16,860.0	82	18	48,597.0	31.20	BBB	Baa1	2.0	CA	47.6	4.6	1.86
Pinnacle West Capital Corp. (NYSE-PNW)	3,526.1	100		12,132.1	8.40	A-	Baa1	4.8	AZ	51.1	9.4	1.83
PNM Resources, Inc. (NYSE-PNM)	1,379.7	100		4,790.2	1.26	BBB+	Baa3	2.4	NM,TX	37.3	0.4	0.75
Portland General Electric Company (NYSE-POR)	1,890.0	100		6,284.0	3.73	BBB	A3	2.6	OR	49.8	8.2	1.62
PPL Corporation (NYSE-PPL)	7,454.0	60		30,794.0	23.69	A-	Baa2	3.2	PA,KY	34.0	17.3	2.30
SCANA Corporation (NYSE-SCG)	4,102.0	61	18	13,145.0	10.16	BBB+	Baa3	3.4	SC,NC,GA	NaN	19.7	1.85
Southern Company (NYSE-SO)	17,393.0	94		63,893.0	47.96	A-	Baa1	5.2	GA,FL,NJ,IL,VA,TN,MS	37.1	10.7	2.12
WEC Energy Group (NYSE-WEC)	7,343.8	62	28	19,398.9	18.94	A-	A3	4.5	WI,IL,MN,MI	47.1	10.2	2.14
Xcel Energy Inc. (NYSE-XEL)	10,819.3	85	14	31,823.3	21.15	A-	A3	3.8	MN,WI,ND,SD,MI	42.9	10.2	1.98
Mean	7,129.5	79	17	21,675.0	15.6	BBB+	Baa1	3.6		45.0	9.0	1.89
Median	6,084.5	81	18	16,741.0	11.9	BBB+	Baa1	3.6		47.1	9.1	1.84

Data Source: AUS Utility Reports, September, 2016; Pre-Tax Interest Coverage and Primary Service Territory are from Value Line Investment Survey, 2016.

Panel B
Hevert Proxy Group

Company	Operating Revenue (\$mil)	Percent Elec Revenue	Percent Gas Revenue	Net Plant (\$mil)	Market Cap (\$mil)	S&P Issuer Credit Rating	Moody's Long Term Rating	Pre-Tax Interest Coverage	Primary Service Area	Common Equity Ratio	Return on Equity	Market to Book Ratio
ALLETE, Inc. (NYSE-ALE)	1,491.7	66		3,631.3	2.94	BBB+	A3	4.1	MN, WI	54.2	8.2	1.59
Alliant Energy Corporation (NYSE-LNT)	3,237.4	77	10	9,846.4	8.68	A-	A3	3.6	WI,IA,IL,MN	48.0	10.1	2.18
Ameren Corporation (NYSE-AEE)	6,002.0	86	19	19,324.0	12.09	BBB+	Baa1	3.8	IL,MO	46.5	9.2	1.75
American Electric Power Co. (NYSE-AEP)	15,983.8	82		47,436.2	32.29	BBB	Baa1	3.8	10 States	46.0	11.1	1.76
Avista Corporation (NYSE-AVA)	1,438.0	69	33	3,990.7	2.62	BBB	Baa1	3.5	WA,ID,AK	49.7	8.6	1.62
CenterPoint Energy (NYSE-CNP)	6,979.0	42	36	11,898.0	9.53	A-	Baa1	2.7	TX,MN,AR,LA,OK	28.4	NM	2.81
CMS Energy Corporation (NYSE-CMS)	6,167.0	69	26	15,187.0	11.80	BBB+	Baa2	2.8	MI	30.3	13.6	2.84
Consolidated Edison, Inc. (NYSE-ED)	12,100.0	71	14	32,600.0	22.82	A-	A3	3.7	NY,PA	47.8	8.6	1.64
DTE Energy Company (NYSE-DTE)	9,913.0	50	13	18,295.0	16.81	BBB+	A3	3.4	MI	47.5	8.6	1.92
Eversource Energy (NYSE-ES)	7,447.2	89	11	20,448.5	17.60	A	Baa1	4.7	CT,NH,MA	50.3	8.4	1.67
FirstEnergy Corporation (ASE-FE)	14,934.0	71		37,461.0	13.78	BBB-	Baa3	2.2	OH,PA,NY,NJ,WV,MD	33.5	NM	1.21
IDACORP, Inc. (NYSE-IDA)	1,251.0	100		4,045.3	3.84	BBB	Baa1	3.5	ID	54.1	9.2	1.84
NorthWestern Corporation (NYSE-NWE)	1,223.4	80	20	4,109.7	2.99	BBB	A3	2.5	MT,SD,NE	44.2	9.1	1.84
OGE Energy Corp. (NYSE-OGE)	2,151.4	100		7,469.9	6.01	A-	A3	4.0	OK,AR	53.3	7.2	1.81
Otter Tail Corporation (NDQ-OTTR)	798.5	52		1,428.6	1.30	BBB	A3	3.6	MN,ND,SD	51.6	9.8	2.04
Pinnacle West Capital Corp. (NYSE-PNW)	3,526.1	100		12,132.1	8.40	A-	Baa1	4.8	AZ	51.1	9.4	1.83
PNM Resources, Inc. (NYSE-PNM)	1,379.7	100		4,790.2	1.26	BBB+	Baa3	2.4	NM,TX	37.3	0.4	0.75
Portland General Electric Company (NYSE-POR)	1,890.0	100		6,284.0	3.73	BBB	A3	2.6	OR	49.8	8.2	1.62
SCANA Corporation (NYSE-SCG)	4,102.0	61	18	13,145.0	10.16	BBB+	Baa3	3.4	SC,NC,GA	NaN	19.7	1.85
Xcel Energy Inc. (NYSE-XEL)	10,819.3	85	14	31,823.3	21.15	A-	A3	3.8	MN,WI,ND,SD,MI	42.9	10.2	1.98
Mean	5,641.7	78	19	15,267.3	10.5	BBB+	Baa1	3.4		45.6	9.4	1.83
Median	3,814.1	79	18	12,015.1	9.1	BBB+	Baa1	3.6		47.8	9.2	1.82

Data Source: AUS Utility Reports, September, 2016; Pre-Tax Interest Coverage and Primary Service Territory are from Value Line Investment Survey, 2016.

Exhibit JRW--4

Granite State Electric
Value Line Risk MetricsPanel A
Electric Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.75	A	2	90	95
Alliant Energy Corporation (NYSE-LNT)	0.75	A	2	85	100
Ameren Corporation (NYSE-AEE)	0.70	A	2	85	95
American Electric Power Co. (NYSE-AEP)	0.65	A	2	90	100
Avista Corporation (NYSE-AVA)	0.70	A	2	80	95
Black Hills Corporation (NYSE-BKH)	0.90	A	2	50	85
CMS Energy Corporation (NYSE-CMS)	0.65	B++	2	80	100
Consolidated Edison, Inc. (NYSE-ED)	0.55	A+	1	95	100
Dominion Resources, Inc. (NYSE-D)	0.70	B++	2	80	100
DTE Energy Company (NYSE-DTE)	0.70	B++	2	90	100
Duke Energy Corporation (NYSE-DUK)	0.60	A	2	80	100
Edison International (NYSE-EIX)	0.65	A	2	65	95
El Paso Electric Company (NYSE-EE)	0.70	B++	2	80	90
Entergy Corporation (NYSE-ETR)	0.65	B++	3	70	95
Eversource Energy (NYSE-ES)	0.70	A	1	85	95
FirstEnergy Corporation (ASE-FE)	0.65	B+	3	45	90
IDACORP, Inc. (NYSE-IDA)	0.75	A	2	90	95
MGE Energy, Inc. (NYSE-MGEE)	0.70	A	1	90	95
NorthWestern Corporation (NYSE-NWE)	0.70	B+	3	90	95
OGE Energy Corp. (NYSE-OGE)	0.90	A	2	85	90
Otter Tail Corporation (NDQ-OTTR)	0.85	B++	2	50	85
PG&E Corporation (NYSE-PCG)	0.65	B+	3	55	95
Pinnacle West Capital Corp. (NYSE-PNW)	0.70	A+	1	80	95
PNM Resources, Inc. (NYSE-PNM)	0.75	B	3	40	90
Portland General Electric Company (NYSE-PO)	0.70	B++	2	70	95
PPL Corporation (NYSE-PPL)	0.70	B++	2	60	100
SCANA Corporation (NYSE-SCG)	0.70	B++	2	100	100
Southern Company (NYSE-SO)	0.55	A	2	100	100
WEC Energy Group (NYSE-WEC)	0.65	A+	1	85	100
Xcel Energy Inc. (NYSE-XEL)	0.60	A+	1	100	100
Mean	0.70	A	2.0	78	96

Data Source: Value Line Investment Survey, 2016.

Panel B
Hevert Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.75	A	2	90	95
Alliant Energy Corporation (NYSE-LNT)	0.75	A	2	85	100
Ameren Corporation (NYSE-AEE)	0.70	A	2	85	95
American Electric Power Co. (NYSE-AEP)	0.65	A	2	90	100
Avista Corporation (NYSE-AVA)	0.70	A	2	80	95
CenterPoint Energy (NYSE-CNP)	0.80	B+	3	90	90
CMS Energy Corporation (NYSE-CMS)	0.65	B++	2	80	100
Consolidated Edison, Inc. (NYSE-ED)	0.55	A+	1	95	100
DTE Energy Company (NYSE-DTE)	0.70	B++	2	90	100
Eversource Energy (NYSE-ES)	0.70	A	1	85	95
FirstEnergy Corporation (ASE-FE)	0.65	B+	3	45	90
IDACORP, Inc. (NYSE-IDA)	0.75	A	2	90	95
NorthWestern Corporation (NYSE-NWE)	0.70	B+	3	90	95
OGE Energy Corp. (NYSE-OGE)	0.90	A	2	85	90
Otter Tail Corporation (NDQ-OTTR)	0.85	B++	2	50	85
Pinnacle West Capital Corp. (NYSE-PNW)	0.70	A+	1	80	95
PNM Resources, Inc. (NYSE-PNM)	0.75	B	3	40	90
Portland General Electric Company (NYSE-PO)	0.70	B++	2	70	95
SCANA Corporation (NYSE-SCG)	0.70	B++	2	100	100
Xcel Energy Inc. (NYSE-XEL)	0.60	A+	1	100	100
Mean	0.71	A	2.0	81	95

Data Source: Value Line Investment Survey, 2016.

Value Line Risk Metrics

Beta

A relative measure of the historical sensitivity of a stock's price to overall fluctuations in the New York Stock Exchange Composite Index. A of 1.50 indicates a stock tends to rise (or fall) 50% more than the New York Stock Exchange Composite Index. The "coefficient" is derived from a regression analysis of the relationship between weekly percent-age changes in the price of a stock and weekly percentage changes in the NYSE Index over a period of five years. In the case of shorter price histories, a smaller time period is used, but two years is the minimum. Betas are adjusted for their long-term tendency to converge toward 1.00.

Financial Strength

A relative measure of of the companies reviewed by Value Line. The relative ratings range from A++ (strongest) down to C (weakest).

Safety Rank

A measurement of potential risk associated with individual common stocks. The Safety Rank is computed by averaging two other Value Line indexes the Price Stability Index and the Financial strength Rating. Safety Ranks range from 1 (Highest) to 5 (Lowest). Conservative investors should try to limit their purchases to equities ranked 1 (Highest) and 2 (Above Average) for Safety.

Earnings Predictability

A measure of the reliability of an earnings forecast. Earnings Predictability is based upon the stability of year-to-year comparisons, with recent years being weighted more heavily than earlier ones. The most reliable forecasts tend to be those with the highest rating (100); the least reliable, the lowest (5). The earnings stability is derived from the standard deviation of percentage changes in quarterly earnings over an eight-year period. Special adjustments are made for comparisons around zero and from plus to minus.

Stock Price Stability

A measure of the stability of a stock's price It includes sensitivity to the market (see Beta as well as the stock's inherent volatility. Value Line Stability ratings range from 1 (highest) to 5 (lowest).

Source: *Value Line Investment Analyzer*.

Capital Structure Ratios and Debt Cost Rates

Exhibit JRW--5

Granite State Electric

Capital Structure Ratios and Debt Cost Rates

Panel A -Pepco's Proposed Capitalization Ratios and Senior Capital Cost Rate

Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	45.00%	5.67%
Common Equity	55.00%	
Total	100.00%	

Panel B - Staff's Proposed Capitalization Ratios and Cost Rates

Capital Source	Capitalization Amount	Capitalization Ratio
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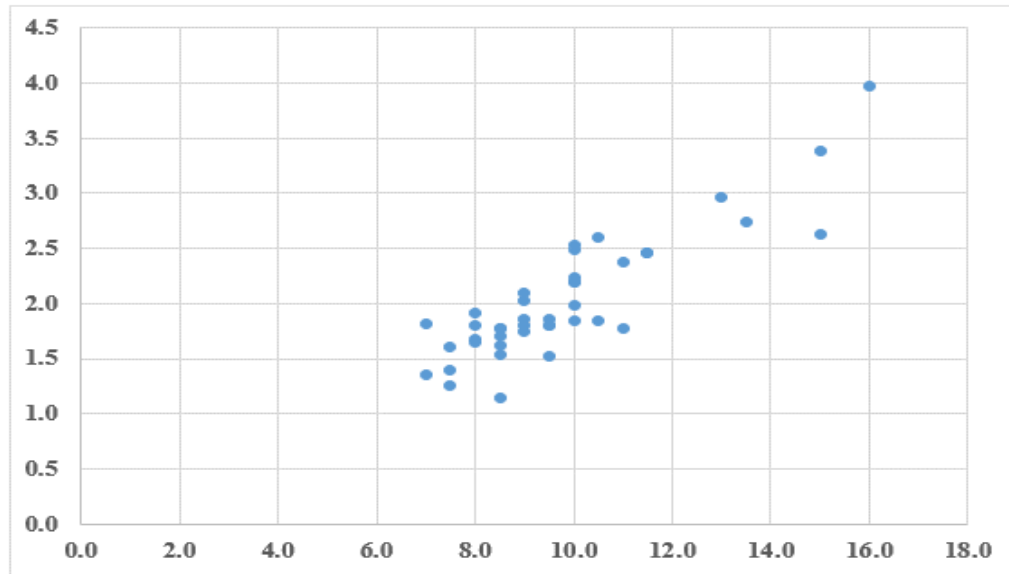
The Relationship Between Expected ROE and Market-to-Book Ratios

Exhibit JRW--6

Electric Utilities

Panel A

Market-to-Book



Expected Return on Equity

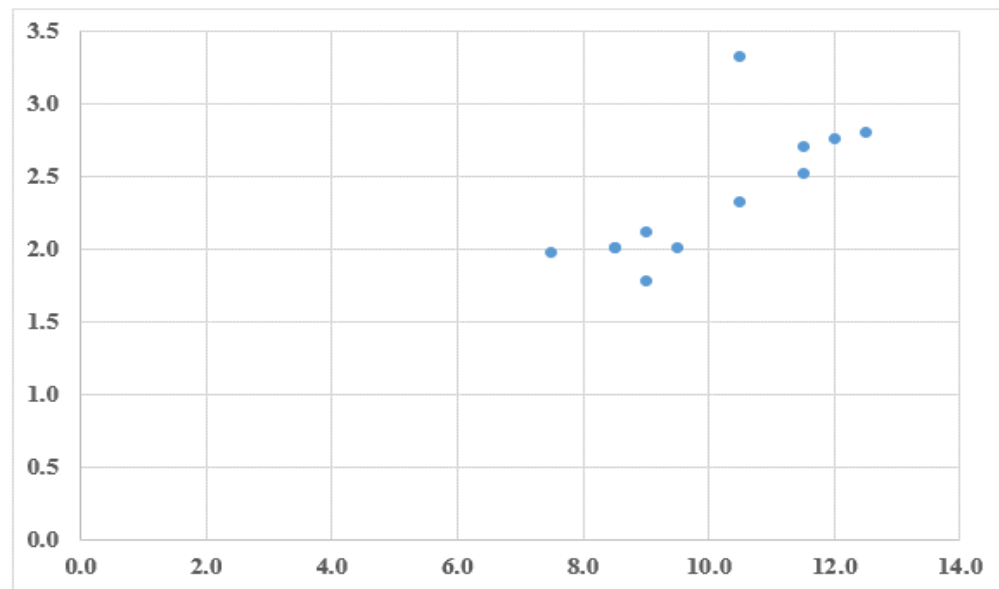
R-Square = .77, N=42

Source: Value Line Investment Survey , 2016.

Panel B

Gas Companies

Market-to-Book



Expected Return on Equity

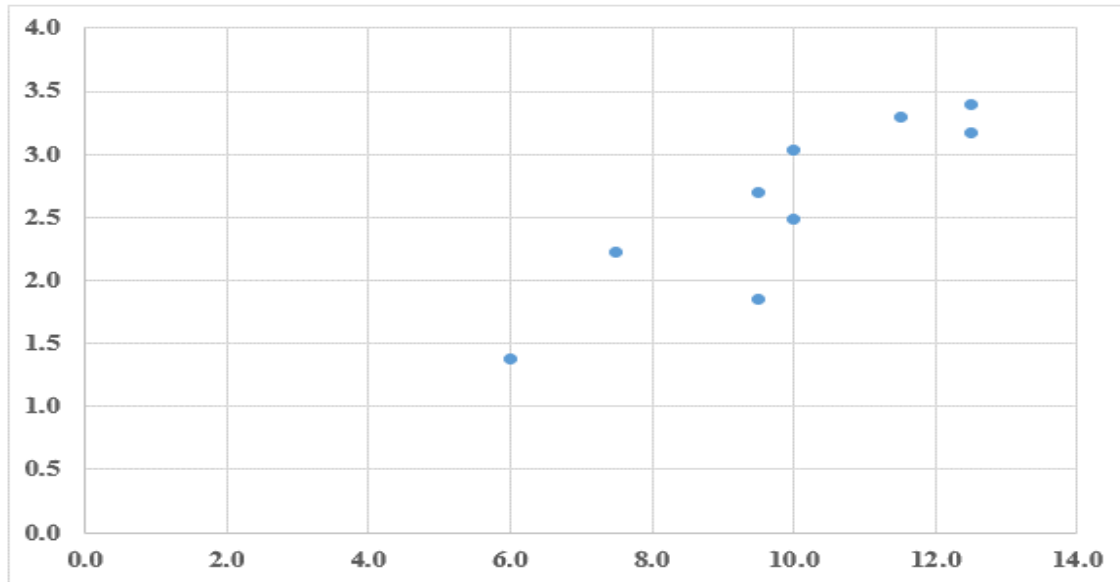
R-Square = .56, N=12

Source: Value Line Investment Survey , 2016.

The Relationship Between Expected ROE and Market-to-Book Ratios

Exhibit JRW--6
Water Companies
Panel C

Market-to-Book



Expected Return on Equity

R-Square = .75, N=9

Source: *Value Line Investment Survey*, 2016.

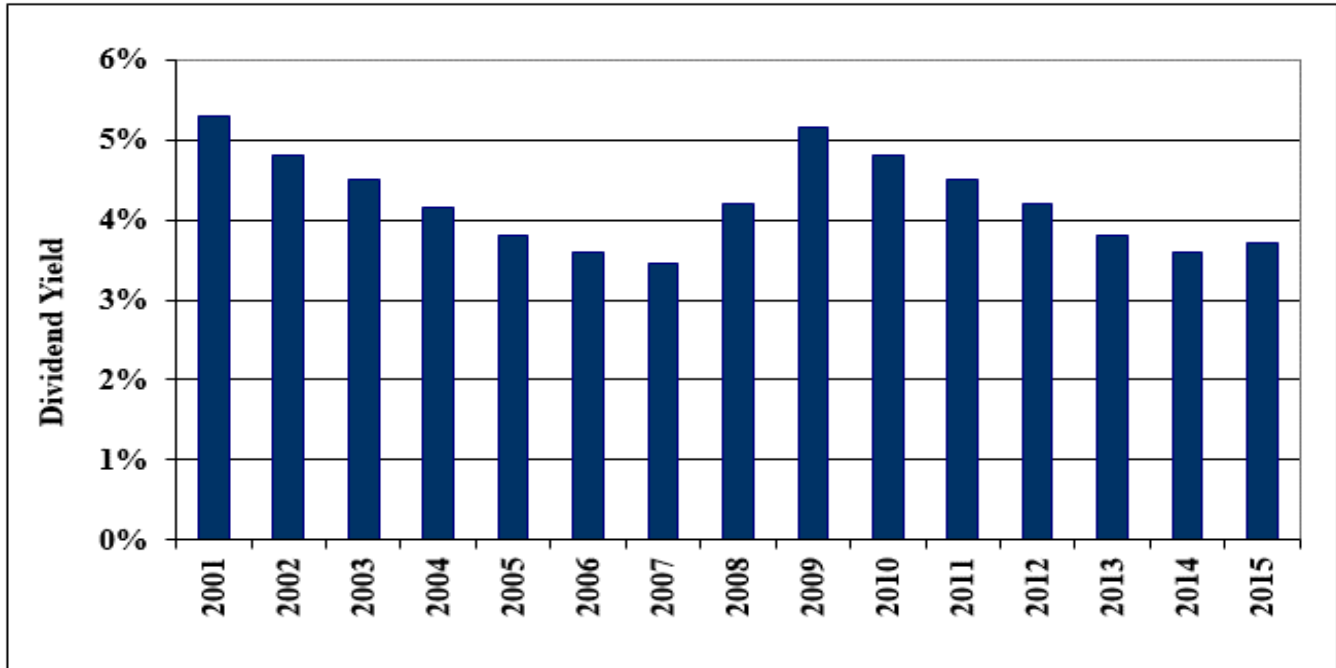
Exhibit JRW--7
Long-Term 'A' Rated Public Utility Bonds



Data Source: Mergent Bond Record

Exhibit JRW--7

Electric Utility Average Dividend Yield

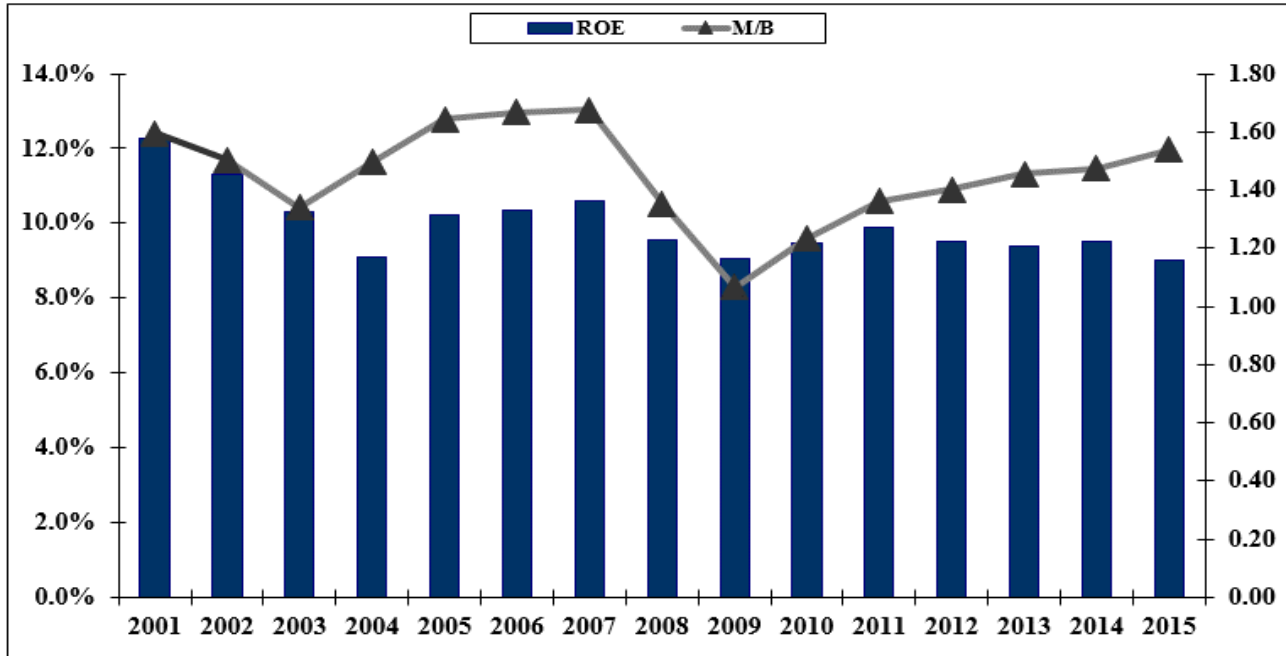


Data Source: Value Line Investment Survey.

Data Source: Value Line Investment Survey.

Exhibit JRW--7

Electric Utility Average Return on Equity and Market-to-Book Ratios



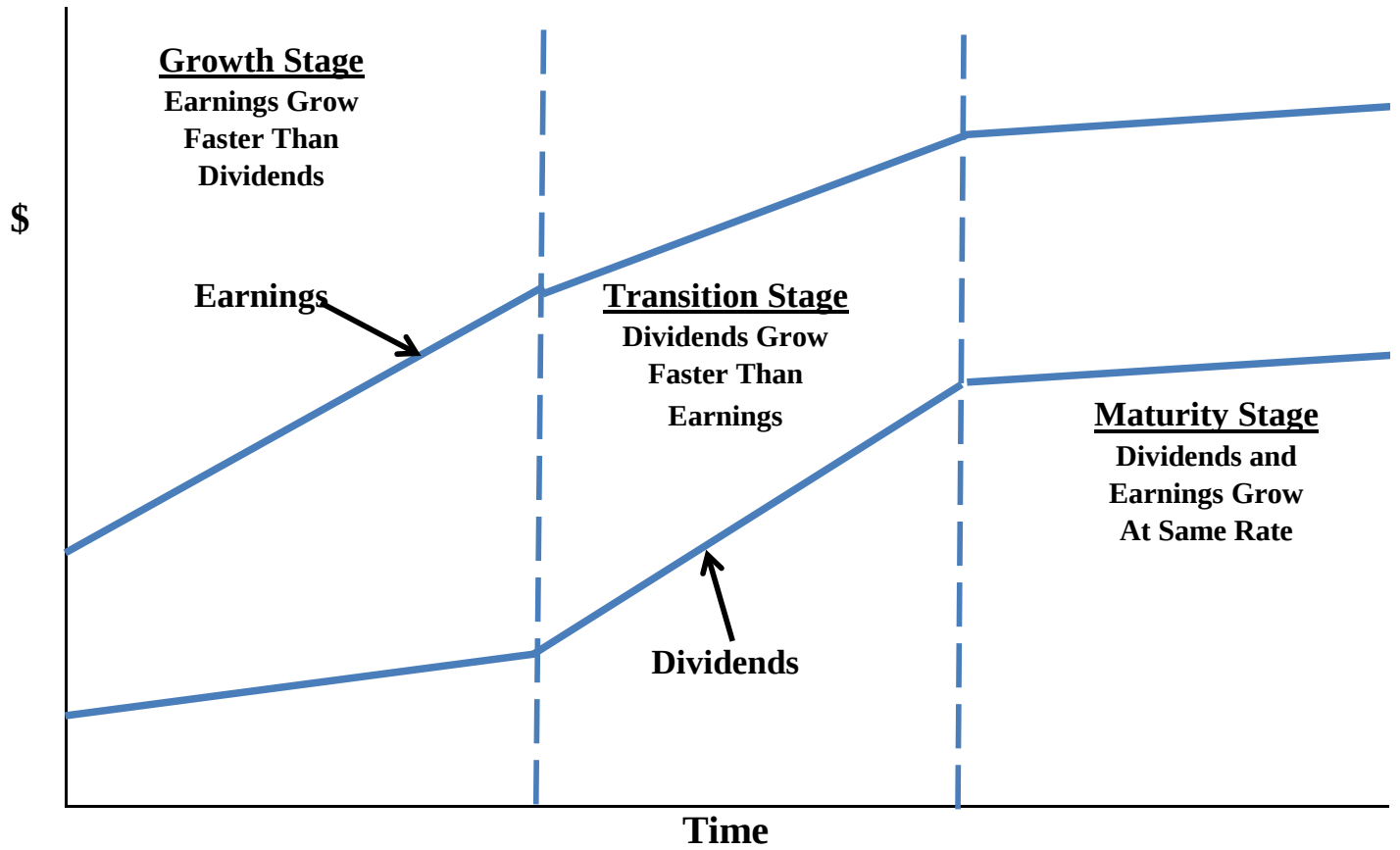
Data Source: Value Line Investment Survey.

Data Source: Value Line Investment Survey.

Exhibit JRW--8

Industry Average Betas					
Industry Name	Beta	Industry Name	Beta	Industry Name	Beta
Petroleum (Producing)	1.62	Office Equip/Supplies	1.17	Foreign Electronics	1.01
Maritime	1.54	Furn/Home Furnishings	1.16	Retail (Softlines)	1.00
Homebuilding	1.48	Precision Instrument	1.16	Cable TV	0.99
Oilfield Svcs/Equip.	1.47	Entertainment	1.16	Information Services	0.99
Metals & Mining (Div.)	1.44	Advertising	1.16	Drug	0.99
Steel	1.43	Biotechnology	1.15	Healthcare Information	0.98
Natural Gas (Div.)	1.41	Trucking	1.15	Investment Co.(Foreign)	0.98
Metal Fabricating	1.36	Diversified Co.	1.14	Med Supp Non-Invasive	0.98
Auto Parts	1.35	Financial Svcs. (Div.)	1.14	Telecom. Utility	0.97
Heavy Truck & Equip	1.35	Computer Software	1.14	Precious Metals	0.97
Building Materials	1.34	Internet	1.14	R.E.I.T.	0.96
Engineering & Const	1.30	Newspaper	1.13	Med Supp Invasive	0.96
Hotel/Gaming	1.30	Apparel	1.13	Funeral Services	0.94
Railroad	1.30	Retail (Hardlines)	1.12	Environmental	0.94
Petroleum (Integrated)	1.29	Computers/Peripherals	1.12	Retail Store	0.93
Chemical (Diversified)	1.27	Educational Services	1.11	Restaurant	0.90
Insurance (Life)	1.26	Paper/Forest Products	1.10	Pharmacy Services	0.89
Electrical Equipment	1.26	Wireless Networking	1.10	Thrift	0.89
Public/Private Equity	1.26	Air Transport	1.09	Reinsurance	0.88
Power	1.25	Bank	1.09	Beverage	0.88
Chemical (Specialty)	1.25	Bank (Midwest)	1.08	Food Processing	0.86
Semiconductor	1.24	Recreation	1.07	Insurance (Prop/Cas.)	0.85
Oil/Gas Distribution	1.24	Medical Services	1.06	Investment Co.	0.85
Chemical (Basic)	1.22	Industrial Services	1.06	Household Products	0.84
E-Commerce	1.22	Retail Building Supply	1.06	Retail/Wholesale Food	0.80
Electronics	1.21	Pipeline MLPs	1.05	Tobacco	0.75
Human Resources	1.20	Packaging & Container	1.04	Electric Util. (Central)	0.75
Automotive	1.19	Toiletries/Cosmetics	1.04	Electric Utility (West)	0.74
Machinery	1.19	Shoe	1.02	Natural Gas Utility	0.74
Entertainment Tech	1.18	Retail Automotive	1.02	Water Utility	0.71
Semiconductor Equip	1.18	Telecom. Services	1.01	Electric Utility (East)	0.68
Telecom. Equipment	1.17	IT Services	1.01		
Publishing	1.171	Aerospace/Defense	1.01		

Exhibit JRW--9
DCF Model



Source: William F. Sharpe, Gordon J. Alexander, and Jeffrey V. Bailey, Investments (Prentice-Hall, 1995), pp. 590-91.

Exhibit JRW--9

DCF Model
Consensus Earnings Estimates
Alliant Energy Corp. (LNT)

www.reuters.com

11/17/2016

Line	Date	# of Estimates	Mean	High	Low
1	Quarter Ending Dec-16	3	0.28	0.31	0.24
2	Quarter Ending Mar-17	2	0.44	0.45	0.42
3	Year Ending Dec-16	9	1.89	1.90	1.84
4	Year Ending Dec-17	9	2.00	2.03	1.95
5	LT Growth Rate (%)	2	6.60	7.20	6.00

Exhibit JRW--10

**Granite State Electric
Discounted Cash Flow Analysis**

**Panel A
Electric Proxy Group**

Dividend Yield*	3.45%
Adjustment Factor	<u>1.025</u>
Adjusted Dividend Yield	3.54%
Growth Rate**	<u>5.00%</u>
Equity Cost Rate	8.55%

* Page 2 of Exhibit JRW--10

** Based on data provided on pages 3, 4, 5, and
6 of Exhibit JRW--10

**Panel B
Hevert Proxy Group**

Dividend Yield*	3.50%
Adjustment Factor	<u>1.02625</u>
Adjusted Dividend Yield	3.59%
Growth Rate**	<u>5.25%</u>
Equity Cost Rate	8.85%

* Page 2 of Exhibit JRW--10

** Based on data provided on pages 3, 4, 5, and

Exhibit JRW--10

Granite State Electric
Monthly Dividend YieldsPanel A
Electric Proxy Group

Company	Annual Dividend	Dividend Yield 30 Day	Dividend Yield 90 Day	Dividend Yield 180 Day
ALLETE, Inc. (NYSE-ALE)	\$ 2.08	3.5%	3.5%	3.6%
Alliant Energy Corporation (NYSE-LNT)	\$ 1.18	3.2%	3.1%	3.2%
Ameren Corporation (NYSE-AEE)	\$ 1.76	3.6%	3.5%	3.6%
American Electric Power Co. (NYSE-AEP)	\$ 2.36	3.8%	3.7%	3.7%
Avista Corporation (NYSE-AVA)	\$ 1.37	3.4%	3.3%	3.4%
Black Hills Corporation (NYSE-BKH)	\$ 1.68	2.8%	2.8%	2.8%
Consolidated Edison, Inc. (NYSE-ED)	\$ 2.68	3.7%	3.6%	3.6%
CMS Energy Corporation (NYSE-CMS)	\$ 1.24	3.0%	2.9%	3.0%
Dominion Resources, Inc. (NYSE-D)	\$ 2.80	3.8%	3.8%	3.8%
DTE Energy Company (NYSE-DTE)	\$ 3.30	3.5%	3.5%	3.6%
Duke Energy Corporation (NYSE-DUK)	\$ 3.42	4.5%	4.3%	4.3%
Edison International (NYSE-EIX)	\$ 1.92	2.7%	2.6%	2.7%
El Paso Electric Company (NYSE-EE)	\$ 1.24	2.8%	2.7%	2.8%
Entergy Corporation (NYSE-ETR)	\$ 3.48	4.9%	4.6%	4.6%
Eversource Energy (NYSE-ES)	\$ 1.78	3.3%	3.2%	3.2%
FirstEnergy Corporation (ASE-FE)	\$ 1.44	4.4%	4.4%	4.3%
IDACORP, Inc. (NYSE-IDA)	\$ 2.20	2.9%	2.9%	2.9%
MGE Energy, Inc. (NYSE-MGEE)	\$ 1.23	2.2%	2.2%	2.3%
NorthWestern Corporation (NYSE-NWE)	\$ 2.00	3.6%	3.5%	3.4%
OGE Energy Corp. (NYSE-OGE)	\$ 1.21	4.0%	3.9%	4.0%
Otter Tail Corporation (NDQ-OTTR)	\$ 1.25	3.6%	3.6%	3.9%
PG&E Corporation (NYSE-PCG)	\$ 1.96	3.3%	3.2%	3.2%
Pinnacle West Capital Corp. (NYSE-PNW)	\$ 2.62	3.5%	3.5%	3.5%
PNM Resources, Inc. (NYSE-PNM)	\$ 0.88	2.8%	2.7%	2.7%
Portland General Electric Company (NYSE-POR)	\$ 1.28	3.1%	3.0%	3.1%
PPL Corporation (NYSE-PPL)	\$ 1.52	4.6%	4.4%	4.2%
SCANA Corporation (NYSE-SCG)	\$ 2.30	3.3%	3.2%	3.3%
Southern Company (NYSE-SO)	\$ 2.24	4.5%	4.4%	4.4%
WEC Energy Group (NYSE-WEC)	\$ 1.98	3.5%	3.3%	3.3%
Xcel Energy Inc. (NYSE-XEL)	\$ 1.36	3.4%	3.3%	3.3%
Mean		3.5%	3.4%	3.5%
Median		3.5%	3.4%	3.4%

Data Sources: <http://quote.yahoo.com>, November 17, 2016.Panel B
Hevert Proxy Group

Company	Annual Dividend	Dividend Yield 30 Day	Dividend Yield 90 Day	Dividend Yield 180 Day
ALLETE, Inc. (NYSE-ALE)	\$ 2.08	3.5%	3.5%	3.6%
Alliant Energy Corporation (NYSE-LNT)	\$ 1.18	3.2%	3.1%	3.2%
Ameren Corporation (NYSE-AEE)	\$ 1.76	3.6%	3.5%	3.6%
American Electric Power Co. (NYSE-AEP)	\$ 2.36	3.8%	3.7%	3.7%
Avista Corporation (NYSE-AVA)	\$ 1.37	3.4%	3.3%	3.4%
CenterPoint Energy (NYSE-CNP)	\$ 1.03	4.6%	4.5%	4.7%
Consolidated Edison, Inc. (NYSE-ED)	\$ 2.68	3.7%	3.6%	3.6%
CMS Energy Corporation (NYSE-CMS)	\$ 1.24	3.0%	2.9%	3.0%
DTE Energy Company (NYSE-DTE)	\$ 3.30	3.5%	3.5%	3.6%
Eversource Energy (NYSE-ES)	\$ 1.78	3.3%	3.2%	3.2%
FirstEnergy Corporation (ASE-FE)	\$ 1.44	4.4%	4.4%	4.3%
IDACORP, Inc. (NYSE-IDA)	\$ 2.20	2.9%	2.9%	2.9%

Exhibit JRW--10

Granite State Electric
DCF Equity Cost Growth Rate Measures
Value Line Historic Growth Rates

Panel A

Electric Proxy Group

Company	Value Line Historic Growth					
	Past 10 Years			Past 5 Years		
	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
ALLETE, Inc. (NYSE-ALE)	4.5	9.5	5.5	5.0	2.5	6.0
Alliant Energy Corporation (NYSE-LNT)	6.0	7.0	4.0	7.0	6.5	4.0
Ameren Corporation (NYSE-AEE)	-2.5	-4.5	-0.5	-4.0	-3.0	-3.0
American Electric Power Co. (NYSE-AEP)	2.5	3.0	5.0	3.5	4.0	5.0
Avista Corporation (NYSE-AVA)	7.5	9.5	4.0	4.0	9.0	4.0
Black Hills Corporation (NYSE-BKH)	4.0	2.5	3.0	15.0	2.0	1.5
CMS Energy Corporation (NYSE-CMS)	13.0		2.5	8.5	16.5	4.0
Consolidated Edison, Inc. (NYSE-ED)	3.5	1.0	4.0	3.0	1.5	3.5
Dominion Resources, Inc. (NYSE-D)	5.5	6.5	2.5	1.5	7.0	1.5
DTE Energy Company (NYSE-DTE)	4.5	3.0	4.0	6.5	5.0	4.0
Duke Energy Corporation (NYSE-DUK)				3.0	2.5	3.0
Edison International (NYSE-EIX)	6.5	9.5	6.0	3.5	4.0	1.5
El Paso Electric Company (NYSE-EE)	12.0		8.0	4.0		7.5
Entergy Corporation (NYSE-ETR)	3.0	6.0	3.5	-3.0	1.5	3.5
Eversource Energy (NYSE-ES)	9.5	9.5	6.0	6.0	11.0	9.0
FirstEnergy Corporation (ASE-FE)	-2.0	-1.0	1.0	-12.0	-7.5	1.5
IDACORP, Inc. (NYSE-IDA)	9.5	2.5	5.0	8.0	8.0	6.0
MGE Energy, Inc. (NYSE-MGEE)	6.5	2.0	6.0	7.0	2.5	5.5
NorthWestern Corporation (NYSE-NWE)		13.0	4.0	7.0	4.5	7.0
OGE Energy Corp. (NYSE-OGE)	7.5	3.5	8.5	6.5	6.0	8.5
Otter Tail Corporation (NDQ-OTTR)	-0.5	1.0	0.5	15.5	0.5	-3.5
PG&E Corporation (NYSE-PCG)	0.5		7.0	-5.5	1.5	3.5
Pinnacle West Capital Corp. (NYSE-PNW)	4.5	2.5	2.0	8.5	2.0	3.5
PNM Resources, Inc. (NYSE-PNM)	1.0	1.0	1.5	23.5	7.0	3.0
Portland General Electric Company (NYSE-POR)	7.0		2.5	6.5	2.5	3.0
PPL Corporation (NYSE-PPL)	2.5	5.5	5.5	4.0	1.5	4.0
SCANA Corporation (NYSE-SCG)	3.5	3.5	5.0	4.5	2.5	5.0
Southern Company (NYSE-SO)	3.0	4.0	5.0	3.5	3.5	4.0
WEC Energy Group (NYSE-WEC)	8.5	14.0	7.5	8.0	18.5	7.5
Xcel Energy Inc. (NYSE-XEL)	5.0	4.0	4.5	6.0	4.5	4.5
Mean	4.9	4.7	4.2	5.2	4.4	3.9
Median	4.5	3.5	4.0	5.5	3.5	4.0
Data Source: Value Line Investment Survey.	Average of Median Figures =			4.2		

Panel B

Hevert Proxy Group

Company	Value Line Historic Growth					
	Past 10 Years			Past 5 Years		
	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
ALLETE, Inc. (NYSE-ALE)	4.5	9.5	5.5	5.0	2.5	6.0
Alliant Energy Corporation (NYSE-LNT)	6.0	7.0	4.0	7.0	6.5	4.0
Ameren Corporation (NYSE-AEE)	-2.5	-4.5	-0.5	-4.0	-3.0	-3.0
American Electric Power Co. (NYSE-AEP)	2.5	3.0	5.0	3.5	4.0	5.0
Avista Corporation (NYSE-AVA)	7.5	9.5	4.0	4.0	9.0	4.0
CenterPoint Energy (NYSE-CNP)	3.5	8.5	8.0	2.0	4.0	7.5
CMS Energy Corporation (NYSE-CMS)	13.0		2.5	8.5	16.5	4.0
Consolidated Edison, Inc. (NYSE-ED)	3.5	1.0	4.0	3.0	1.5	3.5
DTE Energy Company (NYSE-DTE)	4.5	3.0	4.0	6.5	5.0	4.0
Eversource Energy (NYSE-ES)	9.5	9.5	6.0	6.0	11.0	9.0
FirstEnergy Corporation (ASE-FE)	-2.0	-1.0	1.0	-12.0	-7.5	1.5
IDACORP, Inc. (NYSE-IDA)	9.5	2.5	5.0	8.0	8.0	6.0
NorthWestern Corporation (NYSE-NWE)		13.0	4.0	7.0	4.5	7.0
OGE Energy Corp. (NYSE-OGE)	7.5	3.5	8.5	6.5	6.0	8.5
Otter Tail Corporation (NDQ-OTTR)	-0.5	1.0	0.5	15.5	0.5	-3.5
Pinnacle West Capital Corp. (NYSE-PNW)	4.5	2.5	2.0	8.5	2.0	3.5
PNM Resources, Inc. (NYSE-PNM)	1.0	1.0	1.5	23.5	7.0	3.0
Portland General Electric Company (NYSE-POR)	7.0		2.5	6.5	2.5	3.0
SCANA Corporation (NYSE-SCG)	3.5	3.5	5.0	4.5	2.5	5.0
Xcel Energy Inc. (NYSE-XEL)	5.0	4.0	4.5	6.0	4.5	4.5
Mean	4.6	4.3	3.9	5.8	4.4	4.1
Median	4.5	3.3	4.0	6.3	4.3	4.0
Data Source: Value Line Investment Survey.	Average of Median Figures =			4.4		

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Exhibit JRW--10

Granite State Electric
DCF Equity Cost Growth Rate Measures
Value Line Projected Growth Rates

Panel A
Electric Proxy Group

Company	Value Line			Value Line		
	Projected Growth			Sustainable Growth		
	Est'd. '13-'15 to '19-'21			Return on Equity	Retention Rate	Internal Growth
	Earnings	Dividends	Book Value			
ALLETE, Inc. (NYSE-ALE)	4.0	3.5	4.0	8.5%	37.0%	3.1%
Alliant Energy Corporation (NYSE-LNT)	6.0	4.5	4.0	12.5%	39.0%	4.9%
Ameren Corporation (NYSE-AEE)	6.0	4.0	3.5	9.5%	37.0%	3.5%
American Electric Power Co. (NYSE-AEP)	4.0	5.0	4.0	9.5%	33.0%	3.1%
Avista Corporation (NYSE-AVA)	5.0	4.0	3.5	8.5%	35.0%	3.0%
Black Hills Corporation (NYSE-BKH)	7.5	6.0	4.5	10.5%	47.0%	4.9%
CMS Energy Corporation (NYSE-CMS)	6.0	6.5	6.0	13.5%	38.0%	5.1%
Consolidated Edison, Inc. (NYSE-ED)	2.5	3.0	3.5	8.5%	34.0%	2.9%
Dominion Resources, Inc. (NYSE-D)	10.0	8.0	6.0	19.0%	33.0%	6.3%
DTE Energy Company (NYSE-DTE)	6.0	5.5	4.5	10.0%	40.0%	4.0%
Duke Energy Corporation (NYSE-DUK)	4.0	3.5	1.0	8.5%	27.0%	2.3%
Edison International (NYSE-EIX)	3.5	9.5	5.5	11.5%	45.0%	5.2%
El Paso Electric Company (NYSE-EE)	4.0	7.0	4.0	9.0%	41.0%	3.7%
Entergy Corporation (NYSE-ETR)	2.0	3.0	3.0	10.0%	35.0%	3.5%
Eversource Energy (NYSE-ES)	6.0	6.0	4.0	9.5%	42.0%	4.0%
FirstEnergy Corporation (ASE-FE)	6.0	1.0	1.0	8.5%	41.0%	3.5%
IDACORP, Inc. (NYSE-IDA)	3.0	7.5	4.0	9.0%	40.0%	3.6%
MGE Energy, Inc. (NYSE-MGEE)	7.0	4.0	5.0	13.0%	56.0%	7.3%
NorthWestern Corporation (NYSE-NWE)	6.5	5.5	4.5	10.0%	42.0%	4.2%
OGE Energy Corp. (NYSE-OGE)	3.0	9.5	3.5	12.0%	26.0%	3.1%
Otter Tail Corporation (NDQ-OTTR)	6.0	1.5	5.5	10.0%	36.0%	3.6%
PG&E Corporation (NYSE-PCG)	12.0	7.0	4.5	11.0%	41.0%	4.5%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0	5.0	3.5	10.0%	36.0%	3.6%
PNM Resources, Inc. (NYSE-PNM)	9.0	10.0	3.5	9.5%	45.0%	4.3%
Portland General Electric Company (NYSE-POR)	5.5	6.0	3.5	9.0%	41.0%	3.7%
PPL Corporation (NYSE-PPL)	NMF	3.0	NMF	13.5%	31.0%	4.2%
SCANA Corporation (NYSE-SCG)	4.5	5.0	5.0	10.0%	43.0%	4.3%
Southern Company (NYSE-SO)	4.0	3.5	6.5	11.0%	28.0%	3.1%
WEC Energy Group (NYSE-WEC)	6.0	7.0	7.0	11.0%	33.0%	3.6%
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	4.0	11.0%	38.0%	4.2%
Mean	5.5	5.4	4.2	10.6%	38.0%	4.0%
Median	5.5	5.3	4.0	10.0%	38.0%	3.7%
Average of Median Figures =		4.9			Median =	3.7%

* 'Est'd. '13-'15 to '19-'21' is the estimated growth rate from the base period 2013 to 2015 until the future period 2019 to 2021.

Data Source: Value Line Investment Survey.

Panel B
Hevert Proxy Group

Company	Value Line			Value Line		
	Projected Growth			Sustainable Growth		
	Est'd. '13-'15 to '19-'21			Return on Equity	Retention Rate	Internal Growth
	Earnings	Dividends	Book Value			
ALLETE, Inc. (NYSE-ALE)	4.0	3.5	4.0	8.5%	37.0%	3.1%
Alliant Energy Corporation (NYSE-LNT)	6.0	4.5	4.0	12.5%	39.0%	4.9%
Ameren Corporation (NYSE-AEE)	6.0	4.0	3.5	9.5%	37.0%	3.5%
American Electric Power Co. (NYSE-AEP)	4.0	5.0	4.0	9.5%	33.0%	3.1%
Avista Corporation (NYSE-AVA)	5.0	4.0	3.5	8.5%	35.0%	3.0%
CenterPoint Energy (NYSE-CNP)	2.0	4.5	-1.0	15.5%	15.0%	2.3%
CMS Energy Corporation (NYSE-CMS)	6.0	6.5	6.0	13.5%	38.0%	5.1%
Consolidated Edison, Inc. (NYSE-ED)	2.5	3.0	3.5	8.5%	34.0%	2.9%
DTE Energy Company (NYSE-DTE)	6.0	5.5	4.5	10.0%	40.0%	4.0%
Eversource Energy (NYSE-ES)	6.0	6.0	4.0	9.5%	42.0%	4.0%
FirstEnergy Corporation (ASE-FE)	6.0	1.0	1.0	8.5%	41.0%	3.5%
IDACORP, Inc. (NYSE-IDA)	3.0	7.5	4.0	9.0%	40.0%	3.6%
NorthWestern Corporation (NYSE-NWE)	6.5	5.5	4.5	10.0%	42.0%	4.2%
OGE Energy Corp. (NYSE-OGE)	3.0	9.5	3.5	12.0%	26.0%	3.1%
Otter Tail Corporation (NDQ-OTTR)	6.0	1.5	5.5	10.0%	36.0%	3.6%
Pinnacle West Capital Corp. (NYSE-PNW)	4.0	5.0	3.5	10.0%	36.0%	3.6%
PNM Resources, Inc. (NYSE-PNM)	9.0	10.0	3.5	9.5%	45.0%	4.3%
Portland General Electric Company (NYSE-POR)	5.5	6.0	3.5	9.0%	41.0%	3.7%
SCANA Corporation (NYSE-SCG)	4.5	5.0	5.0	10.0%	43.0%	4.3%
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	4.0	11.0%	38.0%	4.2%
Mean	5.0	5.2	3.7	10.2%	36.9%	3.7%
Median	5.5	5.0	4.0	9.8%	38.0%	3.6%
Average of Median Figures =		4.8			Median =	3.6%

* 'Est'd. '13-'15 to '19-'21' is the estimated growth rate from the base period 2013 to 2015 until the future period 2019 to 2021.

Data Source: Value Line Investment Survey.

Exhibit JRW--10

Granite State Electric
DCF Equity Cost Growth Rate Measures
Analysts Projected EPS Growth Rate Estimates

Panel A
Electric Proxy Group

Company	Yahoo	Reuters	Zacks	Mean
ALLETE, Inc. (NYSE-ALE)	5.0%	5.0%	5.5%	5.2%
Alliant Energy Corporation (NYSE-LNT)	6.6%	6.6%	6.1%	6.4%
Ameren Corporation (NYSE-AEE)	5.6%	5.6%	6.1%	5.8%
American Electric Power Co. (NYSE-AEP)	1.9%	1.9%	5.4%	3.0%
Avista Corporation (NYSE-AVA)	5.7%	NA	5.3%	5.5%
Black Hills Corporation (NYSE-BKH)	6.7%	6.7%	5.8%	6.4%
Consolidated Edison, Inc. (NYSE-ED)	2.1%	2.1%	2.8%	2.4%
CMS Energy Corporation (NYSE-CMS)	7.3%	7.3%	6.6%	7.0%
Dominion Resources, Inc. (NYSE-D)	5.8%	5.8%	5.9%	5.9%
DTE Energy Company (NYSE-DTE)	5.6%	5.6%	5.8%	5.7%
Duke Energy Corporation (NYSE-DUK)	3.5%	3.5%	4.7%	3.9%
Edison International (NYSE-EIX)	1.9%	1.9%	5.3%	3.1%
El Paso Electric Company (NYSE-EE)	7.0%	NA	4.4%	5.7%
Entergy Corporation (NYSE-ETR)	-8.3%	-8.3%	-4.8%	-7.2%
Eversource Energy (NYSE-ES)	6.3%	6.3%	6.1%	6.2%
FirstEnergy Corporation (ASE-FE)	-5.3%	-5.3%	-0.4%	-3.6%
IDACORP, Inc. (NYSE-IDA)	4.1%	4.1%	4.4%	4.2%
MGE Energy, Inc. (NYSE-MGEE)	4.0%	NA	NA	4.0%
NorthWestern Corporation (NYSE-NWE)	4.5%	4.5%	5.0%	4.7%
OGE Energy Corp. (NYSE-OGE)	4.0%	4.0%	5.2%	4.4%
Otter Tail Corporation (NDQ-OTTR)	6.0%	NA	NA	6.0%
PG&E Corporation (NYSE-PCG)	5.6%	5.6%	4.3%	5.2%
Pinnacle West Capital Corp. (NYSE-PNW)	4.5%	4.5%	4.5%	4.5%
PNM Resources, Inc. (NYSE-PNM)	6.9%	6.9%	6.8%	6.8%
Portland General Electric Company (NYSE-POR)	6.2%	6.2%	6.2%	6.2%
PPL Corporation (NYSE-PPL)	2.4%	2.4%	3.5%	2.8%
SCANA Corporation (NYSE-SCG)	6.3%	6.5%	5.5%	6.1%
Southern Company (NYSE-SO)	3.3%	3.8%	3.9%	3.7%
WEC Energy Group (NYSE-WEC)	7.0%	6.8%	6.2%	6.7%
Xcel Energy Inc. (NYSE-XEL)	5.7%	5.3%	5.4%	5.5%
	4.3%	4.0%	4.7%	4.4%
	5.6%	5.0%	5.3%	5.3%

Data Sources: www.reuters.com, www.zacks.com, http://quote.yahoo.com, November 17, 2016.

Panel B
Hevert Proxy Group

Company	Yahoo	Reuters	Zacks	Mean
ALLETE, Inc. (NYSE-ALE)	5.0%	5.0%	5.5%	5.2%
Alliant Energy Corporation (NYSE-LNT)	6.6%	6.6%	6.1%	6.4%
Ameren Corporation (NYSE-AEE)	5.6%	5.6%	6.1%	5.8%
American Electric Power Co. (NYSE-AEP)	1.9%	1.9%	5.4%	3.0%
Avista Corporation (NYSE-AVA)	5.7%	NA	5.3%	5.5%
CenterPoint Energy (NYSE-CNP)	5.7%	5.7%	5.5%	5.7%
Consolidated Edison, Inc. (NYSE-ED)	2.1%	2.1%	2.8%	2.4%
CMS Energy Corporation (NYSE-CMS)	7.3%	7.3%	6.6%	7.0%
DTE Energy Company (NYSE-DTE)	5.6%	5.6%	5.8%	5.7%
Eversource Energy (NYSE-ES)	6.3%	6.3%	6.1%	6.2%
FirstEnergy Corporation (ASE-FE)	-5.3%	-5.3%	-0.4%	-3.6%
IDACORP, Inc. (NYSE-IDA)	4.1%	4.1%	4.4%	4.2%
NorthWestern Corporation (NYSE-NWE)	4.5%	4.5%	5.0%	4.7%
OGE Energy Corp. (NYSE-OGE)	4.0%	4.0%	5.2%	4.4%
Otter Tail Corporation (NDQ-OTTR)	6.0%	NA	NA	6.0%
Pinnacle West Capital Corp. (NYSE-PNW)	4.5%	4.5%	4.5%	4.5%
PNM Resources, Inc. (NYSE-PNM)	6.9%	6.9%	6.8%	6.8%
Portland General Electric Company (NYSE-POR)	6.2%	6.2%	6.2%	6.2%
SCANA Corporation (NYSE-SCG)	6.3%	6.5%	5.5%	6.1%
Xcel Energy Inc. (NYSE-XEL)	5.7%	5.3%	5.4%	5.5%
	4.3%	4.0%	4.7%	4.9%
	5.6%	5.0%	5.3%	5.6%

Data Sources: www.reuters.com, www.zacks.com, http://quote.yahoo.com, November 17, 2016.

Exhibit JRW--10

Granite State Electric
DCF Growth Rate Indicators

Electric and Hevert Proxy Groups

Growth Rate Indicator	Electric Proxy Group	Hevert Proxy Group
Historic <i>Value Line</i> Growth in EPS, DPS, and BVPS	4.2%	4.4%
Projected <i>Value Line</i> Growth in EPS, DPS, and BVPS	4.9%	4.8%
Sustainable Growth ROE * Retention Rate	3.7%	3.6%
Projected EPS Growth from Yahoo, Zacks, and Reuters - Mean/Median	4.4%/5.3%	4.9%/5.6%

Exhibit JRW--11

**Granite State Electric
Capital Asset Pricing Model**

**Panel A
Electric Proxy Group**

Risk-Free Interest Rate	4.00%
Beta*	0.70
<u>Ex Ante Equity Risk Premium**</u>	<u>5.50%</u>
CAPM Cost of Equity	7.9%

* See page 3 of Exhibit JRW--11

** See pages 5 and 6 of Exhibit JRW--11

**Panel B
Hevert Proxy Group**

Risk-Free Interest Rate	4.00%
Beta*	0.70
<u>Ex Ante Equity Risk Premium**</u>	<u>5.50%</u>
CAPM Cost of Equity	7.9%

* See page 3 of Exhibit JRW--11

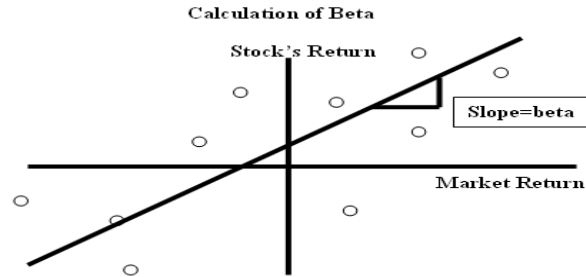
** See pages 5 and 6 of Exhibit JRW--11

Exhibit JRW--11

**Thirty-Year U.S. Treasury Yields
2011-2016**



Source: Federal Reserve Bank of St. Louis, FRED Database.



Panel A
Electric Proxy Group

Company Name	Beta
ALLETE, Inc. (NYSE-ALE)	0.75
Alliant Energy Corporation (NYSE-LNT)	0.75
Ameren Corporation (NYSE-AEE)	0.70
American Electric Power Co. (NYSE-AEP)	0.65
Avista Corporation (NYSE-AVA)	0.70
Black Hills Corporation (NYSE-BKH)	0.90
CMS Energy Corporation (NYSE-CMS)	0.65
Consolidated Edison, Inc. (NYSE-ED)	0.55
Dominion Resources, Inc. (NYSE-D)	0.70
DTE Energy Company (NYSE-DTE)	0.70
Duke Energy Corporation (NYSE-DUK)	0.60
Edison International (NYSE-EIX)	0.65
El Paso Electric Company (NYSE-EE)	0.70
Entergy Corporation (NYSE-ETR)	0.65
Eversource Energy (NYSE-ES)	0.70
FirstEnergy Corporation (ASE-FE)	0.65
IDACORP, Inc. (NYSE-IDA)	0.75
MGE Energy, Inc. (NYSE-MGEE)	0.70
NorthWestern Corporation (NYSE-NWE)	0.70
OGE Energy Corp. (NYSE-OGE)	0.90
Otter Tail Corporation (NDQ-OTTR)	0.85
PG&E Corporation (NYSE-PCG)	0.65
Pinnacle West Capital Corp. (NYSE-PNW)	0.70
PNM Resources, Inc. (NYSE-PNM)	0.75
Portland General Electric Company (NYSE-POR)	0.70
PPL Corporation (NYSE-PPL)	0.70
SCANA Corporation (NYSE-SCG)	0.70
Southern Company (NYSE-SO)	0.55
WEC Energy Group (NYSE-WEC)	0.65
Xcel Energy Inc. (NYSE-XEL)	0.60
Mean	0.70
Median	0.70

Data Source: *Value Line Investment Survey*, 2016.

Panel B
Hevert Proxy Group

Company Name	Beta
ALLETE, Inc. (NYSE-ALE)	0.75
Alliant Energy Corporation (NYSE-LNT)	0.75
Ameren Corporation (NYSE-AEE)	0.70
American Electric Power Co. (NYSE-AEP)	0.65
Avista Corporation (NYSE-AVA)	0.70
CenterPoint Energy (NYSE-CNP)	0.80
CMS Energy Corporation (NYSE-CMS)	0.65
Consolidated Edison, Inc. (NYSE-ED)	0.55
DTE Energy Company (NYSE-DTE)	0.70
Eversource Energy (NYSE-ES)	0.70
FirstEnergy Corporation (ASE-FE)	0.65
IDACORP, Inc. (NYSE-IDA)	0.75
NorthWestern Corporation (NYSE-NWE)	0.70
OGE Energy Corp. (NYSE-OGE)	0.90
Otter Tail Corporation (NDQ-OTTR)	0.85
Pinnacle West Capital Corp. (NYSE-PNW)	0.70
PNM Resources, Inc. (NYSE-PNM)	0.75
Portland General Electric Company (NYSE-POR)	0.70
SCANA Corporation (NYSE-SCG)	0.70
Xcel Energy Inc. (NYSE-XEL)	0.60
Mean	0.71
Median	0.70

Data Source: *Value Line Investment Survey*, 2016.

**Exhibit JRW--11
Risk Premium Approaches**

	Historical Ex Post Returns	Surveys	Expected Return Models and Market Data
Means of Assessing The Market Risk Premium	Historical Average Stock Minus Bond Returns	Surveys of CFOs, Financial Forecasters, Companies, Analysts on Expected Returns and Market Risk Premiums	Use Market Prices and Market Fundamentals (such as Growth Rates) to Compute Expected Returns and Market Risk Premiums
Problems/Debated Issues	Time Variation in Required Returns, Measurement and Time Period Issues, and Biases such as Market and Company Survivorship Bias	Questions Regarding Survey Histories, Responses, and Representativeness Surveys may be Subject to Biases, such as Extrapolation	Assumptions Regarding Expectations, Especially Growth

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

Exhibit JRW-8

Capital Asset Pricing Model
Equity Risk Premium

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range Low	Range High	Midpoint of Range	Mean	Median
Historical Risk Premium	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic				6.00%	
					Geometric				4.40%	
	Damodaran	2015	1928-2014	Historical Stock Returns - Bond Returns	Arithmetic				6.25%	
					Geometric				4.60%	
	Dimson, Marsh, Staunton	2015	1900-2014	Historical Stock Returns - Bond Returns	Arithmetic				4.40%	
					Geometric				4.50%	
	Bate	2008	1900-2007	Historical Stock Returns - Bond Returns	Arithmetic				7.00%	
					Geometric				5.50%	
	Shiller	2006	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic				6.10%	
					Geometric				4.60%	
Ex Ante Models (Puzzle Research)	Siegel	2005	1926-2005	Historical Stock Returns - Bond Returns	Arithmetic				5.50%	
					Geometric				4.77%	
	Dimson, Marsh, and Staunton	2006	1900-2005	Historical Stock Returns - Bond Returns	Arithmetic					
					Geometric					
	Goyal & Welch	2006	1872-2004	Historical Stock Returns - Bond Returns	Arithmetic					
					Geometric					
	Median									5.14%
	Claus Thomas	2001	1985-1998	Abnormal Earnings Model					3.00%	
	Arnott and Bernstein	2002	1810-2001	Fundamentals - Div Yld + Growth					2.40%	
	Constantinides	2002	1872-2000	Historical Returns & Fundamentals - P/D & P/E					6.90%	
Surveys	Cornell	1999	1926-1997	Historical Returns & Fundamental GDP/Earnings		3.50%	5.50%	4.50%	4.50%	
	Easton, Taylor, et al	2002	1981-1998	Residual Income Model					5.30%	
	Fama French	2002	1951-2000	Fundamental DCF with EPS and DPS Growth		2.55%	4.32%		3.44%	
	Harris & Marston	2001	1982-1998	Fundamental DCF with Analysts' EPS Growth					7.14%	
	Best & Byrne	2001								
	McKinsey	2002	1962-2002	Fundamental (P/E, D/P, & Earnings Growth)		3.50%	4.00%		3.75%	
	Siegel	2005	1802-2001	Historical Earnings Yield	Geometric				2.50%	
	Grabowski	2006	1926-2005	Historical and Projected		3.50%	6.00%	4.75%	4.75%	
	Maheu & McCurdy	2006	1885-2003	Historical Excess Returns, Structural Breaks,		4.02%	5.10%	4.56%	4.56%	
	Bostock	2004	1960-2002	Bond Yields, Credit Risk, and Income Volatility		3.90%	1.30%	2.60%	2.60%	
	Bakshi & Chen	2005	1982-1998	Fundamentals - Interest Rates					7.31%	
	Donaldson, Kamstra, & Kramer	2006	1952-2004	Fundamental, Dividend yld., Returns., & Volatility		3.00%	4.00%	3.50%	3.50%	
	Campbell	2008	1982-2007	Historical & Projections (D/P & Earnings Growth)		4.10%	5.40%		4.75%	
	Best & Byrne	2001	Projection	Fundamentals - Div Yld + Growth					2.00%	
	Fernandez	2007	Projection	Required Equity Risk Premium					4.00%	
	DeLong & Magin	2008	Projection	Earnings Yield - TIPS					3.22%	
	Siegel - Rethink ERP	2011	Projection	Real Stock Returns and Components					5.50%	
	Duff & Phelps	2016	Projection	Normalized with 4.0% Long-Term Treasury Yield					5.50%	
	Mschchowski - VL - 2014	2014	Projection	Fundamentals - Expected Return Minus 10-Year Treasury Rate					5.50%	
	American Appraisal Quarterly ERP	2015	Projection	Fundamental Economic and Market Factors					6.00%	
	Damodaran	2016	Projection	Fundamentals - Implied from FCF to Equity Model					5.42%	
	Social Security									
	Office of Chief Actuary		1900-1995							
	John Campbell	2001	1860-2000	Historical & Projections (D/P & Earnings Growth)	Arithmetic	3.00%	4.00%	3.50%	3.50%	
			Projected for 75 Years		Geometric	1.50%	2.50%	2.00%	2.00%	
	Peter Diamond	2001	Projected for 75 Years	Fundamentals (D/P, GDP Growth)		3.00%	4.80%	3.90%	3.90%	
	John Shoven	2001	Projected for 75 Years	Fundamentals (D/P, P/E, GDP Growth)		3.00%	3.50%	3.25%	3.25%	
	Median									4.00%
Building Block	New York Fed	2015	Five-Year	Survey of Wall Street Firms					5.70%	
	Survey of Financial Forecasters	2016	10-Year Projection	About 20 Financial Forecasters					1.90%	
	Duke - CFO Magazine Survey	2016	10-Year Projection	Approximately 500 CFOs					4.25%	
	Welch - Academics	2008	30-Year Projection	Random Academics		5.00%	5.74%	5.37%	5.37%	
	Fernandez - Academics, Analysts, and Compan	2016	Long-Term	Survey of Academics, Analysts, and Companies					5.30%	
	Median									5.30%
Building Block	Ibbotson and Chen	2015	Projection	Historical Supply Model (D/P & Earnings Growth)	Arithmetic			6.22%	5.21%	
					Geometric			4.20%		
	Chen - Rethink ERP	2010	20-Year Projection	Combination Supply Model (Historic and Projection)	Geometric				4.00%	
	Ilmanen - Rethink ERP	2010	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric				3.00%	
	Grinold, Kroner, Siegel - Rethink ERP	2011	Projection	Current Supply Model (D/P & Earnings Growth)	Arithmetic			4.63%	4.12%	
					Geometric			3.60%		
Building Block	Woolridge		2015	Current Supply Model (D/P & Earnings Growth)					4.50%	
	Median									4.12%
Mean										4.64%
Median										4.63%

Exhibit JRW--8

Capital Asset Pricing Model
Equity Risk Premium

Summary of 2010-16 Equity Risk Premium Studies

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range Low High	Midpoint of Range	Mean	Average
Historical Risk Premium	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic			6.00%	
	Damodaran	2015	1928-2014	Historical Stock Returns - Bond Returns	Geometric			4.40%	
					Arithmetic			6.25%	
	Dimson, Marsh, Staunton	2015	1900-2014	Historical Stock Returns - Bond Returns	Geometric			4.60%	
					Arithmetic			4.40%	
	Median				Geometric				5.13%
Ex Ante Models (Puzzle Research)	Siegel - Rethink ERP	2011	Projection	Real Stock Returns and Components				5.50%	
	Duff & Phelps	2016	Projection	Normalized with 4.0% Long-Term Treasury Yield				5.50%	
	Mschchowski - VL - 2014	2014	Projection	Fundamentals - Expected Return Minus 10-Year Treasury Rate				5.50%	
	American Appraisal Quarterly ERP	2015	Projection	Fundamental Economic and Market Factors				6.00%	
	Damodaran	2016	Projection	Fundamentals - Implied from FCF to Equity Model				5.42%	
	Median								5.50%
Surveys	Duarte & Rosa - NY Fed	2015	Projection	Projections from 29 Models				5.70%	
	Survey of Financial Forecasters	2016	10-Year Projection	About 20 Financial Forecasters				1.90%	
	Duke - CFO Magazine Survey	2016	10-Year Projection	Approximately 500 CFOs				4.25%	
	Fernandez - Academics, Analysts, and Companies	2016	Long-Term	Survey of Academics, Analysts, and Companies				5.30%	
	Median								4.78%
Building Block	Ibbotson and Chen	2015	Projection	Historical Supply Model (D/P & Earnings Growth)	Arithmetic		6.22%	5.21%	
					Geometric		4.20%		
	Chen - Rethink ERP	2010	20-Year Projection	Combination Supply Model (Historic and Projection)	Geometric			4.00%	
	Ilmanen - Rethink ERP	2010	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric			3.00%	
	Grinold, Kroner, Siegel - Rethink ERP	2011	Projection	Current Supply Model (D/P & Earnings Growth)	Arithmetic		4.63%	4.12%	
					Geometric		3.60%		
	Woolridge	2015	Projection	Current Supply Model (D/P & Earnings Growth)	Geometric			4.50%	
	Median								4.12%
Mean									4.88%
Median									4.95%

Docket No. DE 16-383
Exhibit JRW--12
Summary of the Company's Proposed Cost of Capital
Page 1 of 1

Exhibit JRW--12

Granite State Electric

Company's Proposed Cost of Capital

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	45.00%	5.88%	2.65%
Common Equity	55.00%	10.30%	5.67%
Total	100.00%		8.31%

Granite State Electric

Panel A

Summary of Mr. Hevert's Constant Growth DCF Results

	Mean Low	Mean	Mean High
30-Day Average	8.47%	9.13%	9.78%
90-Day Average	8.60%	9.27%	9.91%
180-Day Average	8.70%	9.37%	10.01%

Summary of Mr. Hevert's Multi-Stage Growth DCF Results

	Mean Low	Mean	Mean High
30-Day Average	9.39%	8.86%	10.32%
90-Day Average	9.72%	10.20%	10.66%
180-Day Average	9.99%	10.46%	10.93%

Panel B

Summary of Mr. Hevert's CAPM Results

	Bloomberg Derived Market Risk Premium 10.83%	Value Line Derived Market Risk Premium 9.87%
<i>Average Bloomberg Beta - 0.585</i>		
Current 30-Year Treasury - 2.68%	9.02%	8.46%
Near-Term Projected 30-Year Treasury (3.35%)	9.69%	9.13%
<i>Average Value Line Beta - 0.764</i>		
Current 30-Year Treasury - 2.68%	10.95%	10.22%
Near-Term Projected 30-Year Treasury (3.35%)	11.62%	10.89%

Panel C

Summary of Mr. Hevert's Bond Yield RP Results

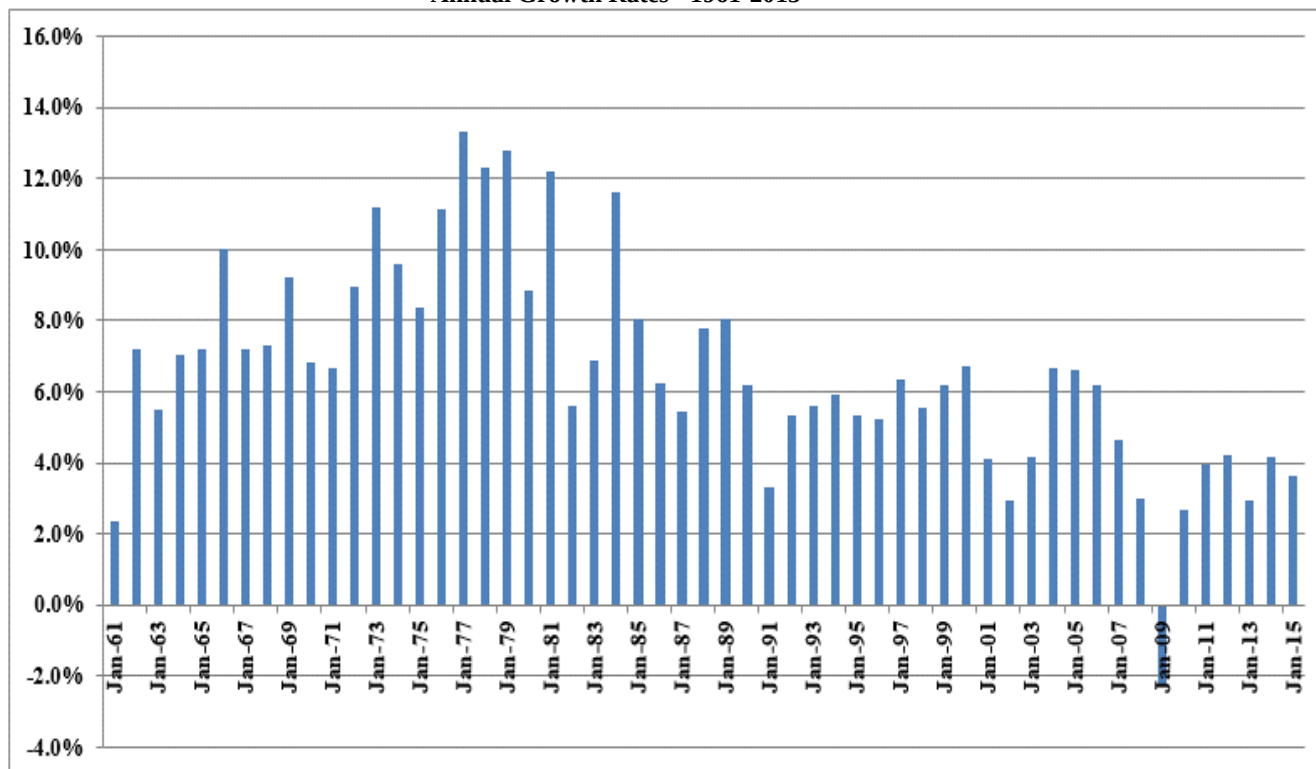
	Low	Mid	High
Long-Term Treasury Yield	2.68%	3.35%	4.65%
Risk Premium	7.36%	6.73%	5.82%
Bond Yield Risk Premium	10.04%	10.08%	10.47%

Growth Rates
GDP, S&P 500 Price, EPS, and DPS

	GDP	S&P 500	Earnings	Dividends	
1960	535.1	58.11	3.10	1.98	
1961	547.6	71.55	3.37	2.04	
1962	586.9	63.10	3.67	2.15	
1963	619.3	75.02	4.13	2.35	
1964	662.9	84.75	4.76	2.58	
1965	710.7	92.43	5.30	2.83	
1966	781.9	80.33	5.41	2.88	
1967	838.2	96.47	5.46	2.98	
1968	899.3	103.86	5.72	3.04	
1969	982.3	92.06	6.10	3.24	
1970	1049.1	92.15	5.51	3.19	
1971	1119.3	102.09	5.57	3.16	
1972	1219.5	118.05	6.17	3.19	
1973	1356.0	97.55	7.96	3.61	
1974	1486.2	68.56	9.35	3.72	
1975	1610.6	90.19	7.71	3.73	
1976	1790.3	107.46	9.75	4.22	
1977	2028.4	95.10	10.87	4.86	
1978	2278.2	96.11	11.64	5.18	
1979	2570.0	107.94	14.55	5.97	
1980	2796.8	135.76	14.99	6.44	
1981	3138.4	122.55	15.18	6.83	
1982	3313.9	140.64	13.82	6.93	
1983	3541.1	164.93	13.29	7.12	
1984	3952.8	167.24	16.84	7.83	
1985	4270.4	211.28	15.68	8.20	
1986	4536.1	242.17	14.43	8.19	
1987	4781.9	247.08	16.04	9.17	
1988	5155.1	277.72	24.12	10.22	
1989	5570.0	353.40	24.32	11.73	
1990	5914.6	330.22	22.65	12.35	
1991	6110.1	417.09	19.30	12.97	
1992	6434.7	435.71	20.87	12.64	
1993	6794.9	466.45	26.90	12.69	
1994	7197.8	459.27	31.75	13.36	
1995	7583.4	615.93	37.70	14.17	
1996	7978.3	740.74	40.63	14.89	
1997	8483.2	970.43	44.09	15.52	
1998	8954.8	1229.23	44.27	16.20	
1999	9510.5	1469.25	51.68	16.71	
2000	10148.2	1320.28	56.13	16.27	
2001	10564.6	1148.09	38.85	15.74	
2002	10876.9	879.82	46.04	16.08	
2003	11332.4	1111.91	54.69	17.88	
2004	12088.6	1211.92	67.68	19.41	
2005	12888.9	1248.29	76.45	22.38	
2006	13684.7	1418.30	87.72	25.05	
2007	14322.9	1468.36	82.54	27.73	
2008	14752.4	903.25	65.39	28.05	
2009	14414.6	1115.10	59.65	22.31	
2010	14798.5	1257.64	83.66	23.12	
2011	15379.2	1257.60	97.05	26.02	Average
2012	16027.2	1426.19	102.47	30.44	
2013	16498.1	1848.36	107.45	36.28	
2014	17183.5	2058.90	113.01	39.44	
2015	17803.4	2043.94	106.32	43.16	
Growth Rate	6.58	6.69	6.64	5.76	6.42

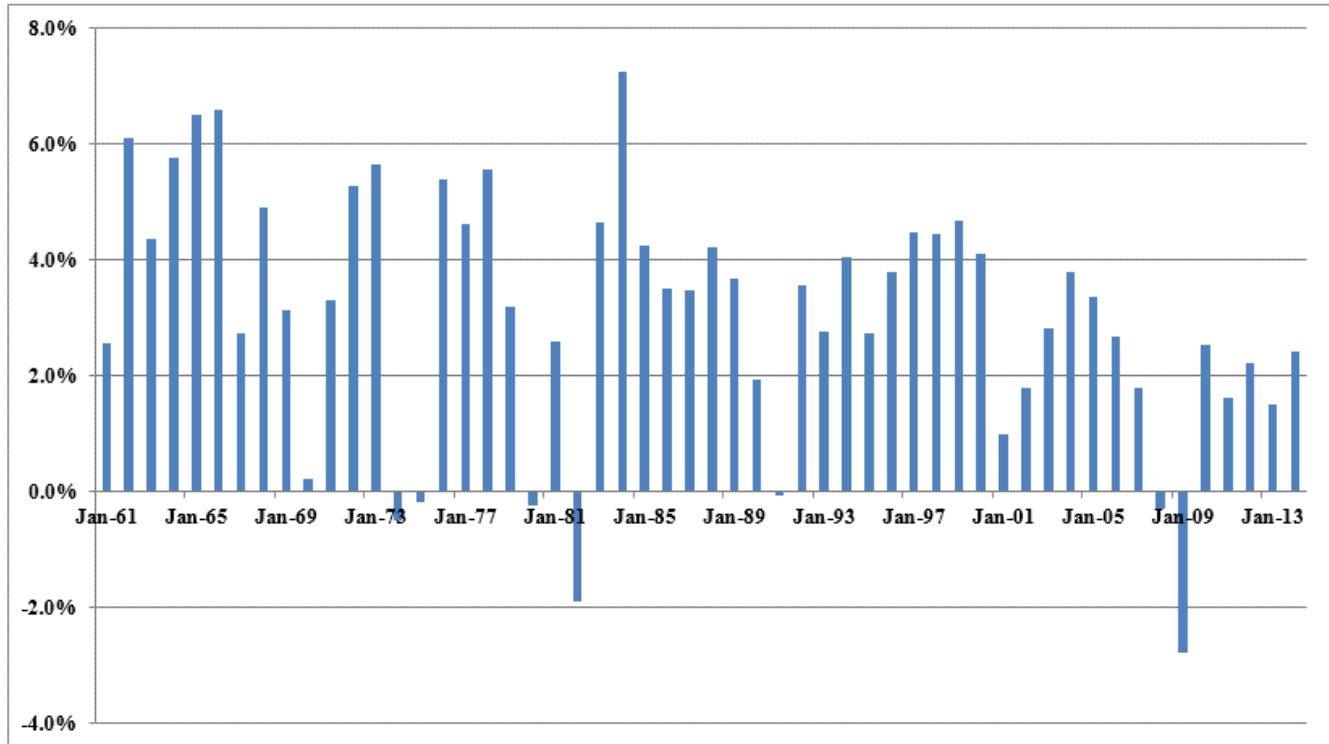
Data Sources: GDPA - <http://research.stlouisfed.org/fred2/series/GDPA/downloaddata>
S&P 500, EPS and DPS - <http://pages.stern.nyu.edu/~adamodar/>

Nominal GDP Growth Rates
Annual Growth Rates - 1961-2015



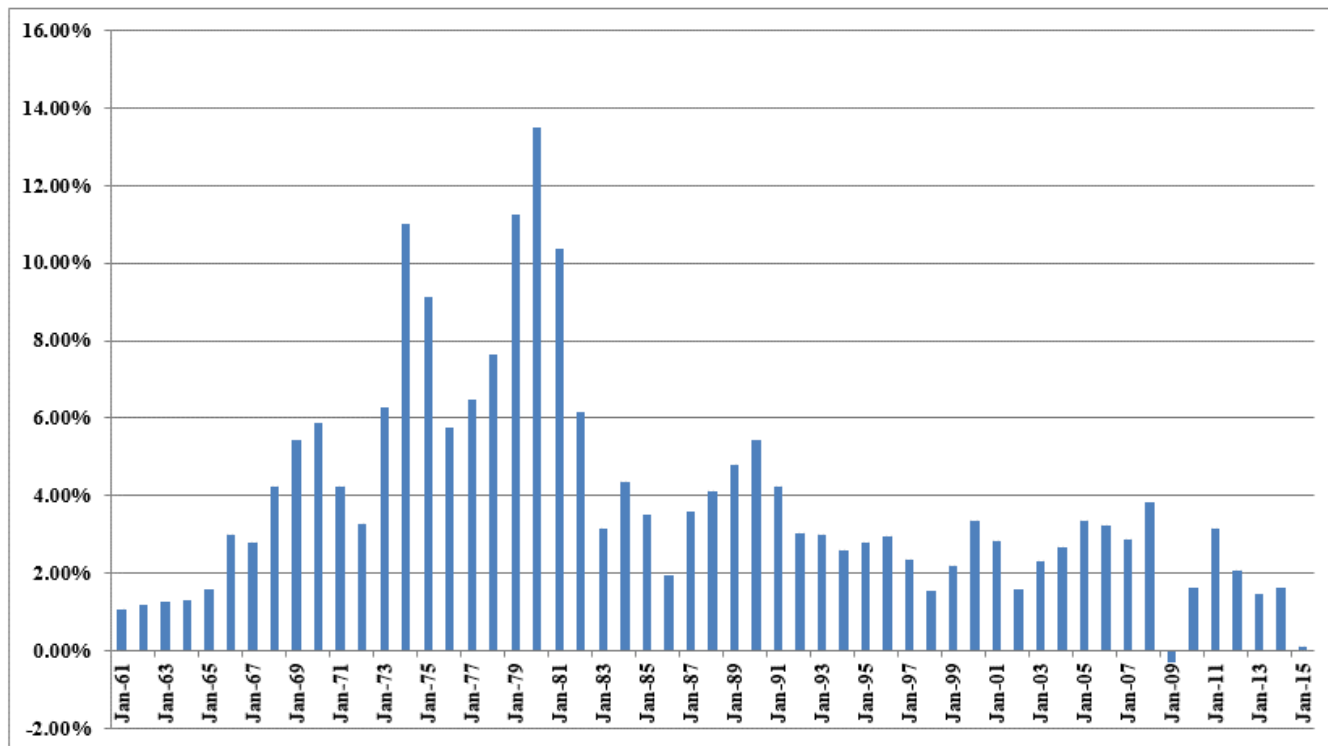
Data Sources: GDPA - <http://research.stlouisfed.org/fred2/series/GDPA/downloaddata>

Annual Real GDP Growth Rates
1961-2015



Data Sources: GDPC1 -<http://research.stlouisfed.org/fred2/series/GDPC1/downloaddata>

Annual Inflation Rates
1961-2015



Data Sources: GDPC1 -<http://research.stlouisfed.org/fred2/series/GDPC1/downloaddata>

Panel A
Historic GDP Growth Rates

10-Year Average		3.28%
20-Year Average		4.36%
30-Year Average		4.87%
40-Year Average		6.19%
50-Year Average		6.65%

Calculated using GDP data on Page 1 of Exhibit JRW--14

Panel B
Projected GDP Growth Rates

	Projected Nominal GDP Time Frame Growth Rate	
Congressional Budget Office	2016-2026	4.1%
Survey of Financial Forecasters	Ten Year	4.5%
Social Security Administration	2016-2090	4.4%
Energy Information Administration	2015-2040	4.3%

Sources:

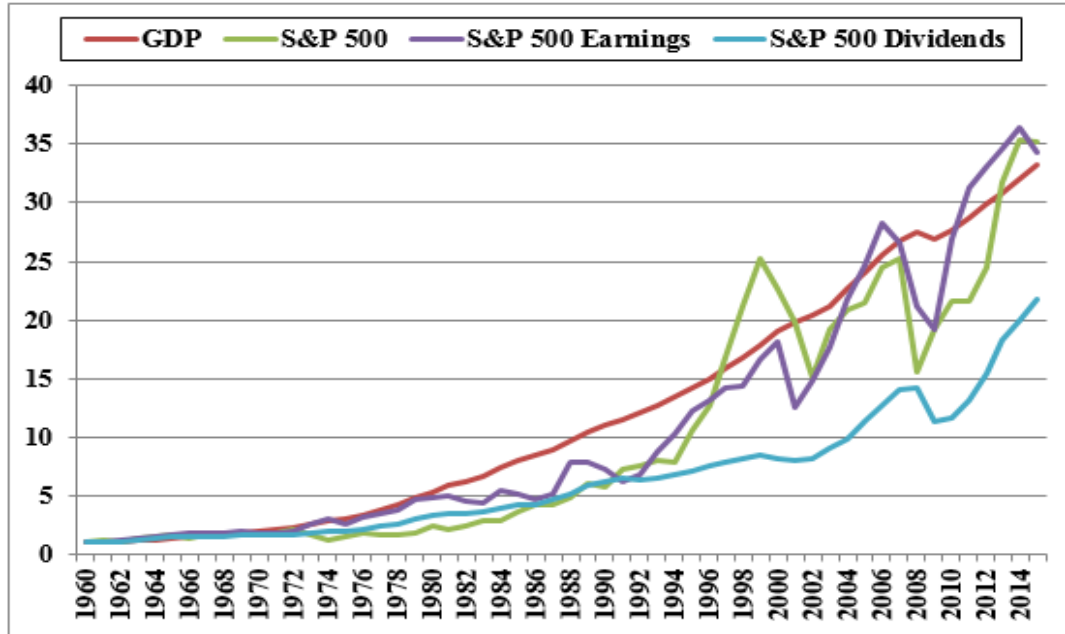
www.cbo.gov/publication/51129

http://www.eia.gov/forecasts/aeo/tables_ref.cfm Table 20

<http://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters>

http://www.ssa.gov/oact/tr/2016/X1_trLOT.html

Long-Term Growth of GDP, S&P 500, S&P 500 EPS, and S&P 500 DPS



	GDP	S&P 500	S&P 500 EPS	S&P 500 DPS
Growth Rates	6.58%	6.69%	6.64%	5.76%