

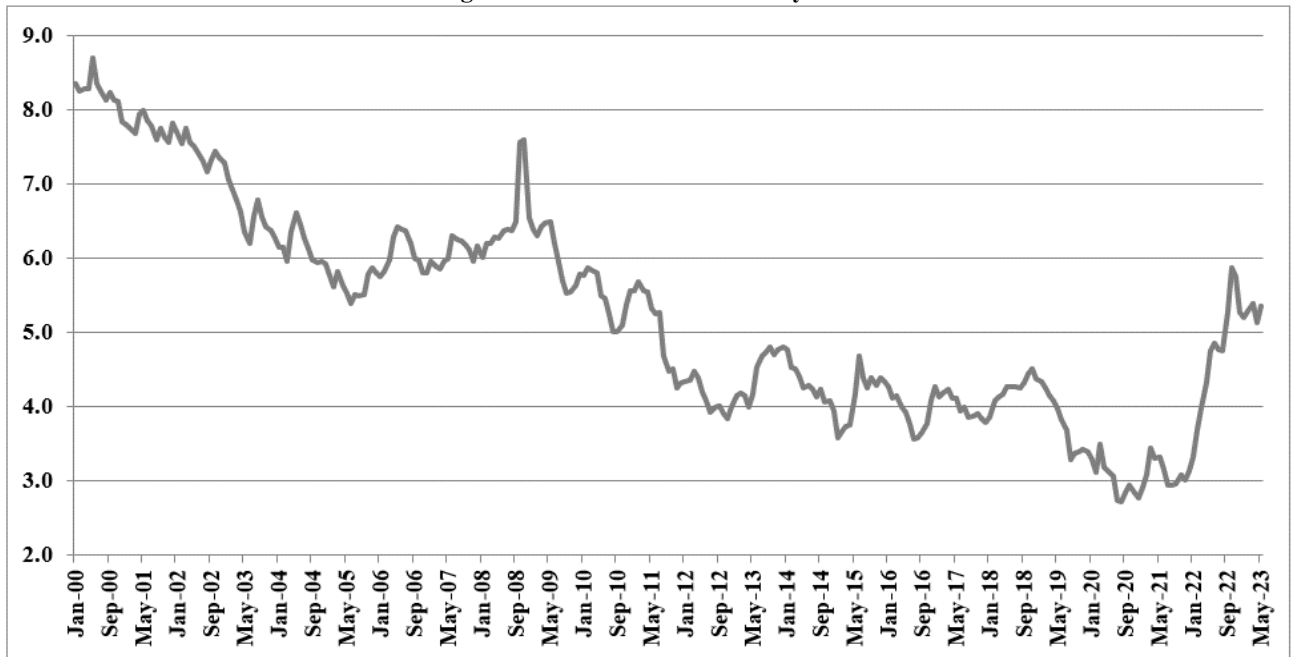
**Exhibit JRW-3**

**Cost of Capital**

**PacifiCorp**

<b>Capital Source</b>	<b>Capitalization Ratio</b>	<b>Cost Rate</b>	<b>Weighted Cost Rate</b>
<b>Long-Term Debt</b>	<b>50.89%</b>	<b>4.77%</b>	<b>2.43%</b>
<b>Preferred Stock</b>	<b>0.01%</b>	<b>6.75%</b>	<b>0.00%</b>
<b>Common Equity</b>	<b>49.10%</b>	<b>9.25%</b>	<b>4.54%</b>

Exhibit JRW-4  
Long-Term 'A' Rated Public Utility Bonds



Data Source: Mergent Bond Record

Exhibit JRW-4

Electric Group Average Dividend Yield

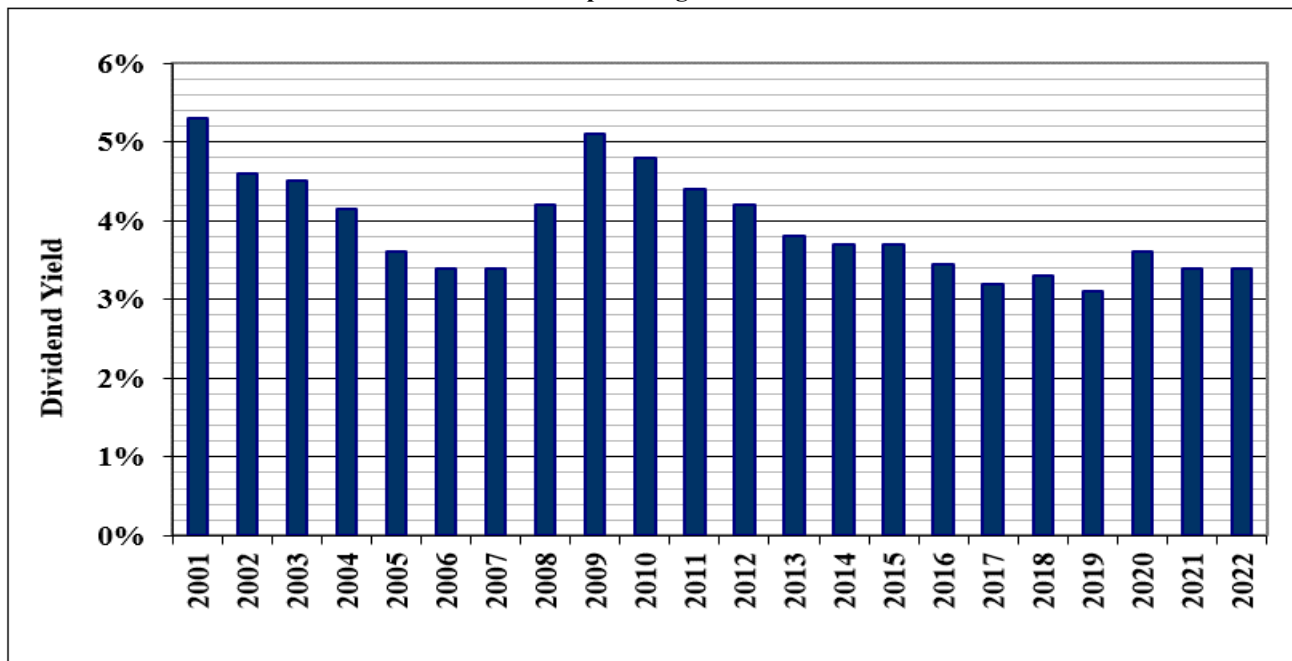
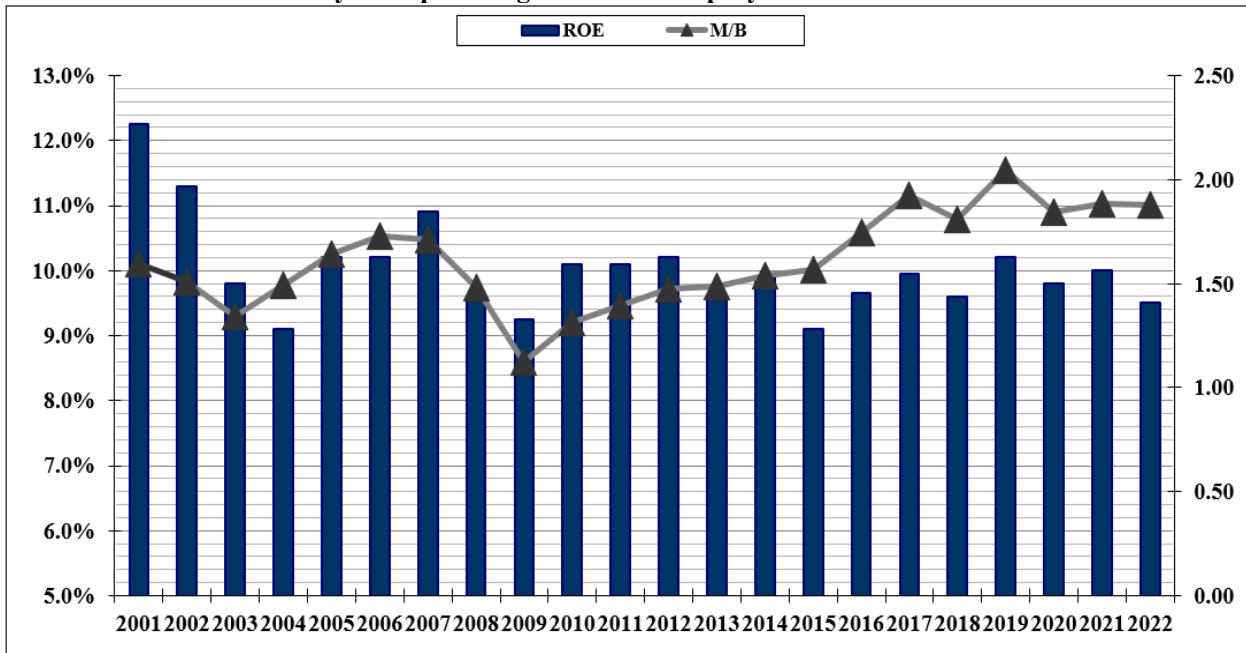


Exhibit JRW-4

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



Data Source: Value Line Investment Survey.

Exhibit JRW-5  
 PacifiCorp  
 Summary Financial Statistics for Proxy Group

Panel A

Electric Proxy Group														
Company		Operating Revenue (\$bil)	Reg Elec Revenue	Percent Reg Gas Revenue	Net Plant (\$bil)	Market Cap (\$bil)	S&P Issuer Credit Rating	Moody's Long Term Rating	Interest Coverage	Primary Service Area	Common Equity Ratio	Return on Equity	Market to Book Ratio	Last Filing Period
ALLETE, Inc. (NYSE-ALE)	ALE	\$1.57	87%	0%	\$5.02	3.51	BBB	Baa1	1.91	MN, WI	58.2%	4.18	1.30	12/31/2022
Alliant Energy Corporation (NYSE-LNT)	LNT	\$4.21	84%	12%	\$16.25	13.30	A-	Baa2	2.86	WI,IA,IL,MN	41.9%	11.19	2.12	12/31/2022
Ameren Corporation (NYSE-AEE)	AEE	\$7.96	78%	15%	\$31.26	22.26	BBB+	Baa1	3.12	IL,MO	41.0%	10.54	2.12	12/31/2022
American Electric Power Co. (NYSE-AEP)	AEP	\$19.23	86%	0%	\$71.93	46.61	A-	Baa2	2.84	10 States	37.2%	9.85	1.99	12/31/2022
Avista Corporation (NYSE-AVA)	AVA	\$1.71	64%	22%	\$5.58	3.13	BBB	Baa2	1.74	NY,CT,ME	44.2%	6.91	1.34	12/31/2022
CMS Energy Corporation (NYSE-CMS)	CMS	\$8.60	68%	28%	\$22.74	17.55	BBB+	Baa2	2.77	MI	32.1%	10.95	2.58	12/31/2022
Consolidated Edison, Inc. (NYSE-ED)	ED	\$15.67	64%	17%	\$47.33	32.50	A-	Baa2	2.71	NY,PA	44.3%	7.75	1.57	12/31/2022
Dominion Resources, Inc. (NYSE-D)	D	\$17.17	79%	19%	\$63.88	47.85	BBB+	Baa2	4.77	VA,NC,SC,OH,WV,UT	35.9%	3.57	1.83	12/31/2022
Duke Energy Corporation (NYSE-DUK)	DUK	\$28.77	90%	8%	\$112.79	74.57	BBB+	Baa2	2.66	NC,OH,FL,SC,KY	38.4%	7.59	1.57	12/31/2022
Edison International (NYSE-EIX)	EIX	\$17.22	100%	0%	\$54.93	25.17	BBB	Baa2	2.22	CA	29.2%	3.47	1.85	12/31/2022
Entergy Corporation (NYSE-ETR)	ETR	\$13.76	94%	0%	\$42.84	22.64	BBB+	Baa2	2.02	LA,AR,MS,TX	32.6%	8.75	1.75	12/31/2022
Evergy, Inc. (NYSE-EVRG)	EVRG	\$5.86	100%	0%	\$22.28	13.95	A-	Baa2	3.30	KS,MO	44.1%	8.17	1.47	12/31/2022
Eversource Energy (NYSE-ES)	ES	\$12.29	75%	18%	\$36.17	27.20	A-	Baa1	3.85	CT,NH,MA	40.2%	9.30	1.76	12/31/2022
Hawaiian Electric Industries (NYSE-HEC)	HE	\$3.73	89%	0%	\$5.72	4.51	BBB-	NR	3.66	HI	40.4%	10.43	2.08	12/31/2022
IDACORP, Inc. (NYSE-IDA)	IDA	\$1.64	100%	0%	\$5.17	5.26	BBB	Baa2	3.27	ID	56.1%	9.46	1.87	12/31/2022
MGE Energy, Inc. (NYSE-MGEE)	MGEE	\$0.70	63%	31%	\$1.98	2.61	NR	NR	5.90	WI	59.5%	10.52	2.41	12/31/2022
NextEra Energy, Inc. (NYSE-NEE)	NEE	\$20.96	83%	0%	\$111.82	144.83	A-	Baa1	6.43	FL	37.5%	6.83	3.69	12/31/2022
NorthWestern Corporation (NYSE-NWE)	NWE	\$1.48	77%	23%	\$5.66	3.45	BBB	Baa2	2.71	MT,SD,NE	50.3%	7.31	1.29	12/31/2022
OGE Energy Corp. (NYSE-OGE)	OGE	\$3.30	100%	0%	\$10.55	7.46	BBB+	Baa1	3.74	OK,AR	49.2%	15.72	1.69	12/31/2022
Pinnacle West Capital Corp. (NYSE-PNWX)	PNWX	\$4.32	95%	0%	\$17.30	8.65	BBB+	Baa1	3.02	AZ	40.5%	8.22	1.43	12/31/2022
Portland General Electric Company (NYSE-POR)	POR	\$2.65	100%	0%	\$8.18	4.32	BBB+	A3	2.45	OR	41.1%	8.49	1.55	12/31/2022
Southern Company (NYSE-SO)	SO	\$28.55	81%	19%	\$95.86	70.50	BBB+	Baa2	3.06	GA,FL,NJ,IL,VA,TN,MS	33.8%	10.18	2.32	12/31/2022
WEC Energy Group (NYSE-WEC)	WEC	\$9.60	59%	23%	\$29.11	28.74	A-	Baa1	3.73	WI,IL,MN,MI	39.7%	12.39	2.53	12/31/2022
Xcel Energy Inc. (NYSE-XEL)	XEL	\$15.20	83%	16%	\$48.44	36.30	A-	Baa1	2.55	MN,WI,ND,SD,MI	39.2%	10.85	2.21	12/31/2022
Mean		\$10.26	83%	11%	\$36.37	\$27.8	BBB+	Baa2	3.22		41.9%	8.86	1.93	
Median		\$8.28	84%	10%	\$25.93	\$19.9	BBB+	Baa2	2.94		40.5%	9.02	1.84	

Data Source: Company 2022 SEC 10-K filings, S&P Capital IQ; Value Line Investment Survey, 2023.

Panel B

Bulkley Proxy Group														
Company		Operating Revenue (\$bil)	Percent Reg Elec Revenue	Percent Reg Gas Revenue	Net Plant (\$bil)	Market Cap (\$bil)	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	Last Filing Period
ALLETE, Inc. (NYSE-ALE)	ALE	\$1.57	87%	0%	\$5.02	3.51	BBB	Baa1	1.91	MN, WI	58.2%	4.18	1.30	12/31/2022
Alliant Energy Corporation (NYSE-LNT)	LNT	\$4.21	84%	12%	\$16.25	13.30	A-	Baa2	2.86	WI,IA,IL,MN	41.9%	11.19	2.12	12/31/2022
Ameren Corporation (NYSE-AEE)	AEE	\$7.96	78%	15%	\$31.26	22.26	BBB+	Baa1	3.12	IL,MO	41.0%	10.54	2.12	12/31/2022
American Electric Power Co. (NYSE-AEP)	AEP	\$19.23	86%	0%	\$71.93	46.61	A-	Baa2	2.84	10 States	37.2%	9.85	1.99	12/31/2022
Avista Corporation (NYSE-AVA)	AVA	\$1.71	64%	22%	\$5.58	3.13	BBB	Baa2	1.74	NY,CT,ME	44.2%	6.91	1.34	12/31/2022
CMS Energy Corporation (NYSE-CMS)	CMS	\$8.60	68%	28%	\$22.74	17.55	BBB+	Baa2	2.77	MI	32.1%	10.95	2.58	12/31/2022
Duke Energy Corporation (NYSE-DUK)	DUK	\$28.77	90%	8%	\$112.79	74.57	BBB+	Baa2	2.66	NC,OH,FL,SC,KY	38.4%	7.59	1.57	12/31/2022
Entergy Corporation (NYSE-ETR)	ETR	\$13.76	94%	0%	\$42.84	22.64	BBB+	Baa2	2.02	LA,AR,MS,TX	32.6%	8.75	1.75	12/31/2022
Evergy, Inc. (NYSE-EVRG)	EVRG	\$5.86	100%	0%	\$22.28	13.95	A-	Baa2	3.30	KS,MO	44.1%	8.17	1.47	12/31/2022
IDACORP, Inc. (NYSE-IDA)	IDA	\$1.64	100%	0%	\$5.17	5.26	BBB	Baa2	3.27	ID	56.1%	9.46	1.87	12/31/2022
NextEra Energy, Inc. (NYSE-NEE)	NEE	\$20.96	83%	0%	\$111.82	144.83	A-	Baa1	6.43	FL	37.5%	6.83	3.69	12/31/2022
NorthWestern Corporation (NYSE-NWE)	NWE	\$1.48	77%	23%	\$5.66	3.45	BBB	Baa2	2.71	MT,SD,NE	50.3%	7.31	1.29	12/31/2022
OGE Energy Corp. (NYSE-OGE)	OGE	\$3.30	100%	0%	\$10.55	7.46	BBB+	Baa1	3.74	OK,AR	49.2%	15.72	1.69	12/31/2022
Otter Tail Corp. (NYSE-OTTR)	OTTR	\$1.46	40%	0%	\$2.23	2.94	BBB	Baa2	10.87	MN,ND,SD	58.9%	25.74	2.41	12/31/2022
Portland General Electric Company (NYSE-POR)	POR	\$2.65	100%	0%	\$8.18	4.32	BBB+	A3	2.45	OR	41.1%	8.49	1.55	12/31/2022
Southern Company (NYSE-SO)	SO	\$28.55	81%	19%	\$95.86	70.50	BBB+	Baa2	3.06	GA,FL,NJ,IL,VA,TN,MS	33.8%	10.18	2.32	12/31/2022
Xcel Energy Inc. (NYSE-XEL)	XEL	\$15.20	83%	16%	\$48.44	36.30	A-	Baa1	2.55	MN,WI,ND,SD,MI	39.2%	10.85	2.21	12/31/2022
Mean		\$9.82	83%	8%	\$36.39	\$29.0	BBB+	Baa2	3.43		43.3%	10.16	1.96	
Median		\$5.86	84%	0%	\$22.28	\$13.9	BBB+	Baa2	2.84		41.1%	9.46	1.87	

Data Source: Company 2022 SEC 10-K filings, S&P Capital IQ; Value Line Investment Survey, 2023.

## Exhibit JRW-5

## PacifiCorp

## Value Line Risk Metrics

## Panel A

## Electric Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.90	A	2	90	90
Alliant Energy Corporation (NYSE-LNT)	0.85	A	2	95	95
Ameren Corporation (NYSE-AEE)	0.85	A	1	100	100
American Electric Power Co. (NYSE-AEP)	0.75	A+	1	95	100
Avista Corporation (NYSE-AVA)	0.90	B++	2	65	75
CMS Energy Corporation (NYSE-CMS)	0.80	A	2	95	95
Consolidated Edison, Inc. (NYSE-ED)	0.80	A+	1	100	90
Dominion Energy Inc. (NYSE-D)	0.85	B++	2	100	90
Duke Energy Corporation (NYSE-DUK)	0.85	A	2	100	95
Edison International (NYSE-EIX)	1.00	B++	3	10	80
Entergy Corporation (NYSE-ETR)	0.90	B++	2	75	90
Evergy, Inc. (NYSE-EVRG)	0.90	B++	2	85	90
Eversource Energy (NYSE-ES)	0.90	A	1	100	80
Hawaiian Electric Industries (NYSE-HE)	0.85	A	2	80	85
IDACORP, Inc. (NYSE-IDA)	0.80	A+	1	100	100
MGE Energy, Inc. (NYSE-MGEE)	0.70	B++	1	100	100
NextEra Energy, Inc. (NYSE-NEE)	0.95	A+	1	95	85
NorthWestern Corporation (NYSE-NWE)	0.95	B++	2	90	90
OGE Energy Corp. (NYSE-OGE)	1.00	A	2	95	85
Pinnacle West Capital Corp. (NYSE-PNW)	0.90	A	2	95	90
Portland General Electric Company (NYSE-POR)	0.90	B++	2	95	95
Southern Company (NYSE-SO)	0.90	A	2	95	95
WEC Energy Group (NYSE-WEC)	0.80	A+	1	100	90
Xcel Energy Inc. (NYSE-XEL)	0.85	A+	1	100	95
Mean	0.87	A	1.7	90	91

Data Source: Value Line Investment Survey, 2023.

## Panel B

## Bulkley Proxy Group

Company	Beta	Financial Strength	Safety	Earnings Predictability	Stock Price Stability
ALLETE, Inc. (NYSE-ALE)	0.90	A	2	90	90
Alliant Energy Corporation (NYSE-LNT)	0.85	A	2	95	95
Ameren Corporation (NYSE-AEE)	0.85	A	1	100	100
American Electric Power Co. (NYSE-AEP)	0.75	A+	1	95	100
Avista Corporation (NYSE-AVA)	0.90	B++	2	65	75
CMS Energy Corporation (NYSE-CMS)	0.80	A	2	95	95
Duke Energy Corporation (NYSE-DUK)	0.85	A	2	100	95
Entergy Corporation (NYSE-ETR)	0.90	B++	2	75	90
Evergy, Inc. (NYSE-EVRG)	0.90	B++	2	85	90
IDACORP, Inc. (NYSE-IDA)	0.80	A+	1	100	100
NextEra Energy, Inc. (NYSE-NEE)	0.95	A+	1	95	85
NorthWestern Corporation (NYSE-NWE)	0.95	B++	2	90	90
OGE Energy Corp. (NYSE-OGE)	1.00	A	2	95	85
Otter Tail Corp. (NYSE-OTTR)	0.90	A	2	65	95
Portland General Electric Company (NYSE-POR)	0.90	B++	2	95	95
Southern Company (NYSE-SO)	0.90	A	2	95	95
Xcel Energy Inc. (NYSE-XEL)	0.85	A+	1	100	95
Mean	0.88	A	1.7	90	92

Data Source: Value Line Investment Survey, 2023.

### *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 beta 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 percentage 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 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's* Stability ratings range from 1 (highest) to 5 (lowest).

Exhibit JRW-6

PacifiCorp

Panel A

PacifiCorp's Proposed Capital Structure and Debt Cost Rate

Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	48.72%	4.77%
Preferred Stock	0.01%	6.75%
<u>Common Equity</u>	<u>51.27%</u>	
Total	100.00%	

Panel B

Public Counsel's Proposed Capital Structure and Debt Cost Ra

Capital Source	Capitalization Ratio	Cost Rate
Long-Term Debt	50.89%	4.77%
Preferred Stock	0.01%	6.75%
<u>Common Equity</u>	<u>49.10%</u>	
Total	100.00%	



**Exhibit JRW-7**

**PacifiCorp  
Discounted Cash Flow Analysis**

**Panel A  
Electric Proxy Group**

<b>Dividend Yield*</b>	<b>3.80%</b>
<b>Adjustment Factor</b>	<b><u>1.027</u></b>
<b>Adjusted Dividend Yield</b>	<b>3.90%</b>
<b>Growth Rate**</b>	<b><u>5.40%</u></b>
<b>Equity Cost Rate</b>	<b>9.30%</b>

\* Page 2 of Exhibit JRW-7

\*\* Based on data provided on pages 3, 4, 5, and  
6 of Exhibit JRW-7

**Panel B  
Bulkley Proxy Group**

<b>Dividend Yield*</b>	<b>3.80%</b>
<b>Adjustment Factor</b>	<b><u>1.0275</u></b>
<b>Adjusted Dividend Yield</b>	<b>3.90%</b>
<b>Growth Rate**</b>	<b><u>5.50%</u></b>
<b>Equity Cost Rate</b>	<b>9.40%</b>

\* Page 2 of Exhibit JRW-7

\*\* Based on data provided on pages 3, 4, 5, and  
6 of Exhibit JRW-7

## Exhibit JRW-7

PacifiCorp  
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)	ALE	\$2.71	4.7%	4.5%	4.4%
Alliant Energy Corporation (NYSE-LNT)	LNT	\$1.81	3.4%	3.4%	3.4%
Ameren Corporation (NYSE-AEE)	AEE	\$2.52	3.0%	2.9%	2.9%
American Electric Power Co. (NYSE-AEP)	AEP	\$3.32	3.9%	3.8%	3.7%
Avista Corporation (NYSE-AVA)	AVA	\$1.84	4.8%	4.4%	4.4%
CMS Energy Corporation (NYSE-CMS)	CMS	\$1.95	3.2%	3.2%	3.2%
Consolidated Edison, Inc. (NYSE-ED)	ED	\$3.24	3.5%	3.4%	3.4%
Dominion Energy Inc. (NYSE-D)	D	\$2.67	5.1%	5.0%	4.7%
Duke Energy Corporation (NYSE-DUK)	DUK	\$4.10	4.5%	4.4%	4.2%
Edison International (NYSE-EIX)	EIX	\$2.95	4.2%	4.2%	4.3%
Entergy Corporation (NYSE-ETR)	ETR	\$4.28	4.3%	4.2%	4.0%
Evergy, Inc. (NYSE-EVRG)	EVRG	\$2.45	4.1%	4.1%	4.0%
Eversource Energy (NYSE-ES)	ES	\$2.70	3.8%	3.7%	3.5%
Hawaiian Electric Industries (NYSE-HE)	HE	\$1.44	3.8%	3.8%	3.7%
IDACORP, Inc. (NYSE-IDA)	IDA	\$3.16	3.1%	3.0%	3.0%
MGE Energy, Inc. (NYSE-MGEE)	MGEE	\$1.63	2.1%	2.1%	2.2%
NextEra Energy, Inc. (NYSE-NEE)	NEE	\$1.87	2.6%	2.5%	2.4%
NorthWestern Corporation (NYSE-NWE)	NWE	\$2.56	4.5%	4.4%	4.4%
OGE Energy Corp. (NYSE-OGE)	OGE	\$1.66	4.6%	4.5%	4.4%
Pinnacle West Capital Corp. (NYSE-PNW)	PNW	\$3.46	4.2%	4.3%	4.4%
Portland General Electric Company (NYSE-POR)	POR	\$1.90	4.0%	3.9%	3.9%
Southern Company (NYSE-SO)	SO	\$2.80	3.9%	3.9%	4.0%
WEC Energy Group (NYSE-WEC)	WEC	\$3.12	3.5%	3.4%	3.4%
Xcel Energy Inc. (NYSE-XEL)	XEL	\$2.08	3.3%	3.2%	3.1%
Mean			3.8%	3.8%	3.7%
Median			3.9%	3.9%	3.8%

Data Sources: S&amp;P Cap IQ., August 7, 2023.

Panel B  
Bulkley Proxy Group

Company		Annual Dividend	Dividend Yield 30 Day	Dividend Yield 90 Day	Dividend Yield 180 Day
ALLETE, Inc. (NYSE-ALE)	ALE	\$2.71	4.7%	4.5%	4.4%
Alliant Energy Corporation (NYSE-LNT)	LNT	\$1.81	3.4%	3.4%	3.4%
Ameren Corporation (NYSE-AEE)	AEE	\$2.52	3.0%	2.9%	2.9%
American Electric Power Co. (NYSE-AEP)	AEP	\$3.32	3.9%	3.8%	3.7%
Avista Corporation (NYSE-AVA)	AVA	\$1.84	4.8%	4.4%	4.4%
CMS Energy Corporation (NYSE-CMS)	CMS	\$1.95	3.2%	3.2%	3.2%
Duke Energy Corporation (NYSE-DUK)	DUK	\$4.10	4.5%	4.4%	4.2%
Entergy Corporation (NYSE-ETR)	ETR	\$4.28	4.3%	4.2%	4.0%
Evergy, Inc. (NYSE-EVRG)	EVRG	\$2.45	4.1%	4.1%	4.0%
IDACORP, Inc. (NYSE-IDA)	IDA	\$3.16	3.1%	3.0%	3.0%
NextEra Energy, Inc. (NYSE-NEE)	NEE	\$1.87	2.6%	2.5%	2.4%
NorthWestern Corporation (NYSE-NWE)	NWE	\$2.56	4.5%	4.4%	4.4%
OGE Energy Corp. (NYSE-OGE)	OGE	\$1.66	4.6%	4.5%	4.4%
Otter Tail Corp. (NYSE-OTTR)	OTTR	\$1.75	2.1%	2.3%	2.5%
Portland General Electric Company (NYSE-POR)	POR	\$1.90	4.0%	3.9%	3.9%
Southern Company (NYSE-SO)	SO	\$2.80	3.9%	3.9%	4.0%
Xcel Energy Inc. (NYSE-XEL)	XEL	\$2.08	3.3%	3.2%	3.1%
Mean			3.8%	3.7%	3.7%
Median			3.9%	3.9%	3.9%

Data Sources: S&amp;P Cap IQ., August 7, 2023.

## Exhibit JRW-7

PacifiCorp  
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)	3.0	3.5	4.5	0.5	3.5	3.0
Alliant Energy Corporation (NYSE-LNT)	6.0	6.5	6.0	8.0	6.5	7.0
Ameren Corporation (NYSE-AEE)	3.5	3.0	1.5	7.0	4.0	4.5
American Electric Power Co. (NYSE-AEP)	5.0	5.0	3.5	4.0	5.0	3.5
Avista Corporation (NYSE-AVA)	2.5	4.5	4.0	0.5	4.0	3.5
CMS Energy Corporation (NYSE-CMS)	6.5	8.0	6.0	6.0	7.0	7.5
Consolidated Edison, Inc. (NYSE-ED)	2.0	2.5	4.0	1.5	3.0	4.0
Dominion Energy Inc. (NYSE-D)	3.0	4.0	4.5	2.5	0.5	5.5
Duke Energy Corporation (NYSE-DUK)	3.0	3.0	2.0	4.5	3.5	1.0
Edison International (NYSE-EIX)	3.0	7.5	1.0	2.0	6.5	-0.5
Entergy Corporation (NYSE-ETR)	-0.5	1.5	1.5	1.5	2.5	4.0
Eversource Energy (NYSE-ES)	6.5	7.5	5.5	5.5	6.0	4.5
Hawaiian Electric Industries (NYSE-HE)	4.0	1.0	3.0	3.0	2.0	2.5
IDACORP, Inc. (NYSE-IDA)	4.0	8.5	5.0	4.0	6.5	4.5
MGE Energy, Inc. (NYSE-MGEE)	5.0	4.0	6.0	6.0	4.5	6.0
Nextera Energy, Inc. (NYSE-NEE)	8.0	11.0	8.0	11.0	12.0	7.5
NorthWestern Corporation (NYSE-NWE)	3.5	5.5	6.0	1.0	4.0	4.5
OGE Energy Corp. (NYSE-OGE)	3.0	7.5	4.0	4.5	6.5	1.5
Pinnacle West Capital Corp. (NYSE-PNW)	4.5	4.0	4.0	3.5	5.5	4.0
Portland General Electric Company (NYSE-POR)	4.0	5.0	3.0	5.0	6.0	3.0
Southern Company (NYSE-SO)	3.0	3.5	3.0	3.0	3.5	2.5
WEC Energy Group (NYSE-WEC)	6.5	10.0	7.0	7.0	6.5	3.5
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	5.0	6.0	6.0	5.5
Mean	4.1	5.3	4.3	4.2	5.0	4.0
Median	4.0	5.0	4.0	4.0	5.0	4.0
Average of Median Figures =				4.3		

Data Source: Value Line Investment Survey.

Panel B  
Bulkley 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)	3.0	3.5	4.5	0.5	3.5	3.0
Alliant Energy Corporation (NYSE-LNT)	6.0	6.5	6.0	8.0	6.5	7.0
Ameren Corporation (NYSE-AEE)	3.5	3.0	1.5	7.0	4.0	4.5
American Electric Power Co. (NYSE-AEP)	5.0	5.0	3.5	4.0	5.0	3.5
Avista Corporation (NYSE-AVA)	2.5	4.5	4.0	0.5	4.0	3.5
CMS Energy Corporation (NYSE-CMS)	6.5	8.0	6.0	6.0	7.0	7.5
Duke Energy Corporation (NYSE-DUK)	3.0	3.0	2.0	4.5	3.5	1.0
Entergy Corporation (NYSE-ETR)	-0.5	1.5	1.5	1.5	2.5	4.0
Eversource Energy (NYSE-ES)	6.5	7.5	5.5	5.5	6.0	4.5
Hawaiian Electric Industries (NYSE-HE)	4.0	1.0	3.0	3.0	2.0	2.5
IDACORP, Inc. (NYSE-IDA)	4.0	8.5	5.0	4.0	6.5	4.5
MGE Energy, Inc. (NYSE-MGEE)	5.0	4.0	6.0	6.0	4.5	6.0
Nextera Energy, Inc. (NYSE-NEE)	8.0	11.0	8.0	11.0	12.0	7.5
NorthWestern Corporation (NYSE-NWE)	3.5	5.5	6.0	1.0	4.0	4.5
OGE Energy Corp. (NYSE-OGE)	3.0	7.5	4.0	4.5	6.5	1.5
Otter Tail Corp. (NYSE-OTTR)	18.0	2.5	3.5	14.5	4.0	6.0
Portland General Electric Company (NYSE-POR)	4.0	5.0	3.0	5.0	6.0	3.0
Southern Company (NYSE-SO)	3.0	3.5	3.0	3.0	3.5	2.5
Xcel Energy Inc. (NYSE-XEL)	5.5	6.0	5.0	6.0	6.0	5.5
Mean	4.9	5.3	4.2	5.1	5.3	4.3
Median	3.8	5.0	4.0	4.5	4.5	4.3
Average of Median Figures =				4.3		

Data Source: Value Line Investment Survey.

## Exhibit JRW-7

**PacifiCorp**  
**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. '20-'22 to '26-'28			Return on Equity	Retention Rate	Internal Growth
Earnings	Dividends	Book Value				
ALLETE, Inc. (NYSE-ALE)	6.0	3.5	3.5	9.0%	40.0%	3.6%
Alliant Energy Corporation (NYSE-LNT)	6.5	6.0	5.0	12.0%	40.0%	4.8%
Ameren Corporation (NYSE-AEE)	6.5	6.5	6.5	10.0%	40.0%	4.0%
American Electric Power Co. (NYSE-AEP)	6.0	5.5	6.0	11.0%	39.0%	4.3%
Avista Corporation (NYSE-AVA)	6.5	4.0	3.5	7.5%	28.0%	2.1%
CMS Energy Corporation (NYSE-CMS)	6.5	6.0	7.0	14.0%	38.0%	5.3%
Consolidated Edison, Inc. (NYSE-ED)	6.0	3.5	3.0	9.0%	37.0%	3.3%
Dominion Energy Inc. (NYSE-D)	2.5	2.0	4.5	11.0%	36.0%	4.0%
Duke Energy Corporation (NYSE-DUK)	5.0	2.0	2.5	9.0%	32.0%	2.9%
Edison International (NYSE-EIX)	4.5	5.0	2.5	14.0%	36.0%	5.0%
Entergy Corporation (NYSE-ETR)	0.5	4.0	4.0	8.5%	23.0%	2.0%
Evergy, Inc. (NYSE-EVRG)	7.5	7.0	3.5	10.0%	37.0%	3.7%
Eversource Energy (NYSE-ES)	6.5	6.5	4.5	10.0%	38.0%	3.8%
Hawaiian Electric Industries (NYSE-HE)	4.5	3.5	3.0	11.0%	39.0%	4.3%
IDACORP, Inc. (NYSE-IDA)	4.5	6.5	4.0	9.5%	34.0%	3.2%
MGE Energy, Inc. (NYSE-MGEE)	6.5	6.0	7.0	12.0%	51.0%	6.1%
Nextera Energy, Inc. (NYSE-NEE)	9.5	10.0	8.0	14.5%	38.0%	5.5%
NorthWestern Corporation (NYSE-NWE)	3.5	2.0	3.5	8.0%	33.0%	2.6%
OGE Energy Corp. (NYSE-OGE)	6.5	3.0	5.5	13.0%	43.0%	5.6%
Pinnacle West Capital Corp. (NYSE-PNW)	2.5	2.0	3.0	9.5%	34.0%	3.2%
Portland General Electric Company (NYSE-POR)	5.0	5.5	4.0	9.5%	35.0%	3.3%
Southern Company (NYSE-SO)	6.5	3.5	3.5	14.5%	33.0%	4.8%
WEC Energy Group (NYSE-WEC)	6.0	7.0	4.0	13.0%	36.0%	4.7%
Xcel Energy Inc. (NYSE-XEL)	6.0	6.5	5.0	11.0%	38.0%	4.2%
Mean	5.5	4.9	4.4	10.9%	36.6%	4.0%
Median	6.0	5.3	4.0	10.5%	37.0%	4.0%
Average of Median Figures =		5.1			Median =	4.0%

\* 'Est'd. '20-'22 to '26-'28 is the estimated growth rate from the base period 2020 to 2022 until the future period 2026 to 2028.

Data Source: *Value Line Investment Survey*.

Panel B  
**Bulkley Proxy Group**

Company	Value Line			Value Line		
	Projected Growth			Sustainable Growth		
	Est'd. '20-'22 to '26-'28			Return on Equity	Retention Rate	Internal Growth
Earnings	Dividends	Book Value				
ALLETE, Inc. (NYSE-ALE)	6.0	3.5	3.5	9.0%	40.0%	3.6%
Alliant Energy Corporation (NYSE-LNT)	6.5	6.0	5.0	12.0%	40.0%	4.8%
Ameren Corporation (NYSE-AEE)	6.5	6.5	6.5	10.0%	40.0%	4.0%
American Electric Power Co. (NYSE-AEP)	6.0	5.5	6.0	11.0%	39.0%	4.3%
Avista Corporation (NYSE-AVA)	6.5	4.0	3.5	7.5%	28.0%	2.1%
CMS Energy Corporation (NYSE-CMS)	6.5	6.0	7.0	14.0%	38.0%	5.3%
Duke Energy Corporation (NYSE-DUK)	5.0	2.0	2.5	9.0%	32.0%	2.9%
Entergy Corporation (NYSE-ETR)	0.5	4.0	4.0	8.5%	23.0%	2.0%
Evergy, Inc. (NYSE-EVRG)	7.5	7.0	3.5	10.0%	37.0%	3.7%
IDACORP, Inc. (NYSE-IDA)	4.5	6.5	4.0	9.5%	34.0%	3.2%
Nextera Energy, Inc. (NYSE-NEE)	9.5	10.0	8.0	14.5%	38.0%	5.5%
NorthWestern Corporation (NYSE-NWE)	3.5	2.0	3.5	8.0%	33.0%	2.6%
OGE Energy Corp. (NYSE-OGE)	6.5	3.0	5.5	13.0%	43.0%	5.6%
Otter Tail Corp. (NYSE-OTTR)	4.5	7.0	8.0	11.5%	40.0%	4.6%
Portland General Electric Company (NYSE-POR)	5.0	5.5	4.0	9.5%	35.0%	3.3%
Xcel Energy Inc. (NYSE-XEL)	6.0	6.5	5.0	11.0%	38.0%	4.2%
Mean	5.7	5.3	5.0	10.5%	36.1%	3.9%
Median	6.0	5.8	4.5	10.0%	38.0%	3.9%
Average of Median Figures =		5.4			Median =	3.9%

\* 'Est'd. '20-'22 to '26-'28 is the estimated growth rate from the base period 2020 to 2022 until the future period 2026 to 2028.

Data Source: *Value Line Investment Survey*.

## Exhibit JRW-7

**PacifiCorp**  
**DCF Equity Cost Growth Rate Measures**  
**Analysts Projected EPS Growth Rate Estimates**

Panel A  
**Electric Proxy Group**

Company		Yahoo	Zacks	S&P	Mean
ALLETE, Inc. (NYSE-ALE)	ALE	8.1%	8.1%	7.8%	8.0%
Alliant Energy Corporation (NYSE-LNT)	LNT	7.0%	6.5%	6.2%	6.5%
Ameren Corporation (NYSE-AEE)	AEE	5.9%	6.4%	7.0%	6.4%
American Electric Power Co. (NYSE-AEP)	AEP	5.2%	5.6%	5.9%	5.6%
Avista Corporation (NYSE-AVA)	AVA	6.3%	6.4%	5.3%	6.0%
CMS Energy Corporation (NYSE-CMS)	CMS	7.8%	7.8%	7.8%	7.8%
Consolidated Edison, Inc. (NYSE-ED)	ED	6.1%	2.0%	4.6%	4.2%
Dominion Energy Inc. (NYSE-D)	D	9.0%	20.0%	-2.5%	8.8%
Duke Energy Corporation (NYSE-DUK)	DUK	5.7%	6.1%	6.1%	6.0%
Edison International (NYSE-EIX)	EIX	4.5%	3.7%	5.3%	4.5%
Entergy Corporation (NYSE-ETR)	ETR	6.6%	5.7%	6.8%	6.4%
Evergy, Inc. (NYSE-EVRG)	EVRG	2.7%	5.2%	5.3%	4.4%
Eversource Energy (NYSE-ES)	ES	6.7%	5.7%	5.6%	6.0%
Hawaiian Electric Industries (NYSE-HE)	HE	1.3%	2.4%	3.8%	2.5%
IDACORP, Inc. (NYSE-IDA)	IDA	3.7%	3.7%	4.6%	4.0%
MGE Energy, Inc. (NYSE-MGEE)	MGEE	5.4%	5.4%	5.4%	5.4%
Nextera Energy, Inc. (NYSE-NEE)	NEE	8.8%	8.4%	8.5%	8.6%
NorthWestern Corporation (NYSE-NWE)	NWE	4.5%	5.2%	5.0%	4.9%
OGE Energy Corp. (NYSE-OGE)	OGE	-12.3%	3.7%	1.4%	-2.4%
Pinnacle West Capital Corp. (NYSE-PNW)	PNW	6.1%	6.3%	6.5%	6.3%
Portland General Electric Company (NYSE-POR)	POR	5.9%	6.0%	6.8%	6.2%
Southern Company (NYSE-SO)	SO	7.3%	4.0%	5.8%	5.7%
WEC Energy Group (NYSE-WEC)	WEC	5.5%	5.8%	6.3%	5.8%
Xcel Energy Inc. (NYSE-XEL)	XEL	6.7%	6.3%	6.0%	6.5%
Mean		5.2%	6.1%	5.5%	5.6%
Median		6.0%	5.7%	5.8%	6.0%

Data Sources: www.zacks.com, http://quote.yahoo.com, S&amp;P Cap IQ, August 6, 2023.

Panel B  
**Bulkley Proxy Group**

Company		Yahoo	Zacks	S&P	Mean
ALLETE, Inc. (NYSE-ALE)	ALE	8.1%	8.1%	7.8%	8.0%
Alliant Energy Corporation (NYSE-LNT)	LNT	7.0%	6.5%	6.2%	6.5%
Ameren Corporation (NYSE-AEE)	AEE	5.9%	6.4%	7.0%	6.4%
American Electric Power Co. (NYSE-AEP)	AEP	5.2%	5.6%	5.9%	5.6%
Avista Corporation (NYSE-AVA)	AVA	6.3%	6.4%	5.3%	6.0%
CMS Energy Corporation (NYSE-CMS)	CMS	7.8%	7.8%	7.8%	7.8%
Duke Energy Corporation (NYSE-DUK)	DUK	5.7%	6.1%	6.1%	6.0%
Entergy Corporation (NYSE-ETR)	ETR	6.6%	5.7%	6.8%	6.4%
Evergy, Inc. (NYSE-EVRG)	EVRG	2.7%	5.2%	5.3%	4.4%
IDACORP, Inc. (NYSE-IDA)	IDA	3.7%	3.7%	4.6%	4.0%
Nextera Energy, Inc. (NYSE-NEE)	NEE	8.8%	8.4%	8.5%	8.6%
NorthWestern Corporation (NYSE-NWE)	NWE	4.5%	5.2%	5.0%	4.9%
OGE Energy Corp. (NYSE-OGE)	OGE	-12.3%	3.7%	1.4%	-2.4%
Otter Tail Corp. (NYSE-OTTR)	OTTR	9.0%	NA	6.8%	7.9%
Portland General Electric Company (NYSE-POR)	POR	5.9%	6.0%	6.8%	6.2%
Southern Company (NYSE-SO)	SO	7.3%	4.0%	5.8%	5.7%
WEC Energy Group (NYSE-WEC)	WEC	5.5%	5.8%	6.3%	5.8%
Xcel Energy Inc. (NYSE-XEL)	XEL	6.7%	6.3%	6.0%	6.5%
Mean		5.2%	5.9%	6.1%	5.8%
Median		6.1%	6.0%	6.1%	6.1%

Data Sources: www.zacks.com, http://quote.yahoo.com, S&amp;P Cap IQ, August 6, 2023.

Exhibit JRW-7

PacifiCorp  
DCF Growth Rate Indicators

Growth Rate Indicator	Electric Proxy Group	Bulkley Proxy Group
Historic <i>Value Line</i> Growth in EPS, DPS, and BVPS	4.3%	4.3%
Projected <i>Value Line</i> Growth in EPS, DPS, and BVPS	5.1%	5.4%
Sustainable Growth ROE * Retention Rate	4.0%	3.9%
Projected EPS Growth from Yahoo, Zacks, and S&P Cap IQ - Mean/Median	5.6%/6.0%	5.8%/6.1%

**Exhibit JRW-8**

**PacifiCorp  
Capital Asset Pricing Model**

**Panel A  
Electric Proxy Group**

<b>Risk-Free Interest Rate</b>	<b>4.30%</b>
<b>Beta*</b>	<b>0.88</b>
<b><u>Ex Ante Market Risk Premium**</u></b>	<b><u>5.50%</u></b>
<b>CAPM Cost of Equity</b>	<b>9.15%</b>

\* See page 3 of Exhibit JRW-8

\*\* See pages 5 and 6 of Exhibit JRW-8

**Panel B  
Bulkley Proxy Group**

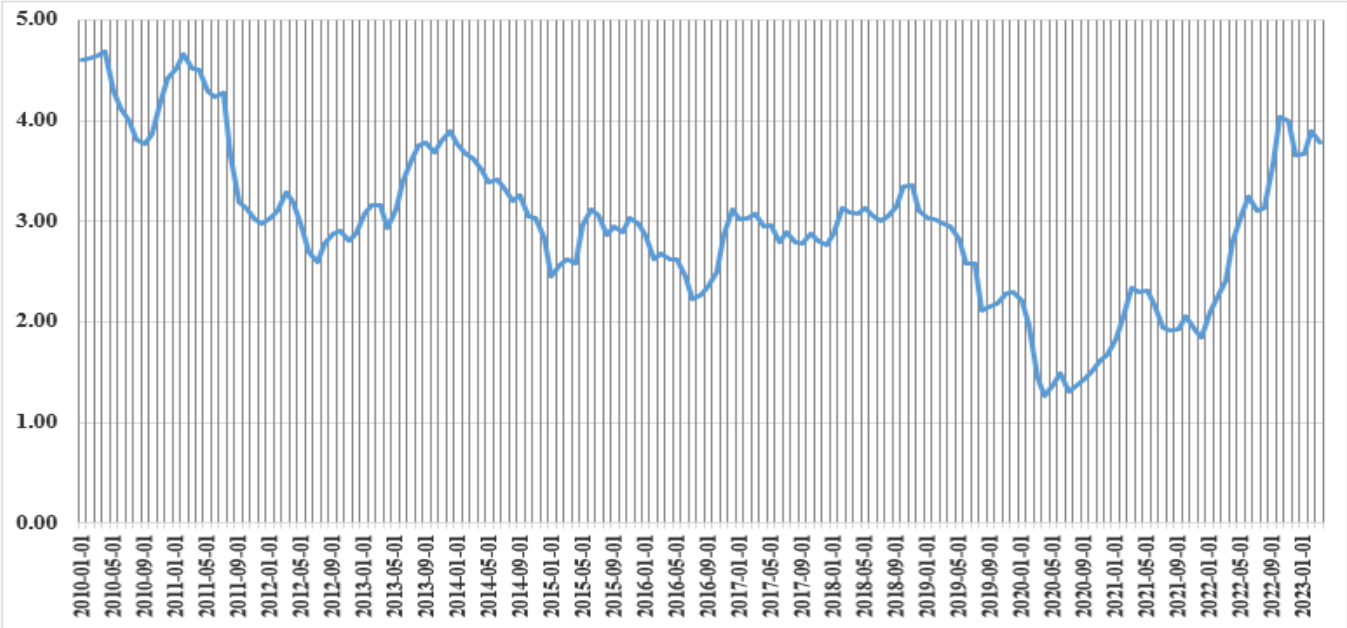
<b>Risk-Free Interest Rate</b>	<b>4.30%</b>
<b>Beta*</b>	<b>0.90</b>
<b><u>Ex Ante Market Risk Premium**</u></b>	<b><u>5.50%</u></b>
<b>CAPM Cost of Equity</b>	<b>9.25%</b>

\* See page 3 of Exhibit JRW-8

\*\* See pages 5 and 6 of Exhibit JRW-8

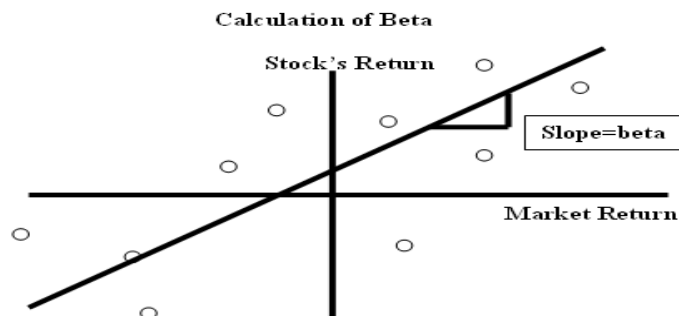
Exhibit JRW-8

Thirty-Year U.S. Treasury Yields  
2010-2023



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





Company	Beta
ALLETE, Inc. (NYSE-ALE)	0.90
Alliant Energy Corporation (NYSE-LNT)	0.85
Ameren Corporation (NYSE-AEE)	0.85
American Electric Power Co. (NYSE-AEP)	0.75
Avista Corporation (NYSE-AVA)	0.90
CMS Energy Corporation (NYSE-CMS)	0.80
Consolidated Edison, Inc. (NYSE-ED)	0.80
Dominion Energy Inc. (NYSE-D)	0.85
Duke Energy Corporation (NYSE-DUK)	0.85
Edison International (NYSE-EIX)	1.00
Entergy Corporation (NYSE-ETR)	0.90
Evergy, Inc. (NYSE-EVRG)	0.90
Eversource Energy (NYSE-ES)	0.90
Hawaiian Electric Industries (NYSE-HE)	0.85
IDACORP, Inc. (NYSE-IDA)	0.80
MGE Energy, Inc. (NYSE-MGEE)	0.70
NextEra Energy, Inc. (NYSE-NEE)	0.95
NorthWestern Corporation (NYSE-NWE)	0.95
OGE Energy Corp. (NYSE-OGE)	1.00
Pinnacle West Capital Corp. (NYSE-PNW)	0.90
Portland General Electric Company (NYSE-POR)	0.90
Southern Company (NYSE-SO)	0.90
WEC Energy Group (NYSE-WEC)	0.80
Xcel Energy Inc. (NYSE-XEL)	0.85
Mean	0.87
Median	0.88

Data Source: *Value Line Investment Survey*, 2023.

**Panel B  
 Bulkley Proxy Group**

Company	Beta
ALLETE, Inc. (NYSE-ALE)	0.90
Alliant Energy Corporation (NYSE-LNT)	0.85
Ameren Corporation (NYSE-AEE)	0.85
American Electric Power Co. (NYSE-AEP)	0.75
Avista Corporation (NYSE-AVA)	0.90
CMS Energy Corporation (NYSE-CMS)	0.80
Duke Energy Corporation (NYSE-DUK)	0.85
Entergy Corporation (NYSE-ETR)	0.90
Evergy, Inc. (NYSE-EVRG)	0.90
IDACORP, Inc. (NYSE-IDA)	0.80
NextEra Energy, Inc. (NYSE-NEE)	0.95
NorthWestern Corporation (NYSE-NWE)	0.95
OGE Energy Corp. (NYSE-OGE)	1.00
Otter Tail Corp. (NYSE-OTTR)	0.85
Portland General Electric Company (NYSE-POR)	0.90
Southern Company (NYSE-SO)	0.90
Xcel Energy Inc. (NYSE-XEL)	0.85
Mean	0.88
Median	0.90

Data Source: *Value Line Investment Survey*, 2023.

**Exhibit JRW-8  
 Risk Premium Approaches**

	<b>Historical Ex Post Returns</b>	<b>Surveys</b>	<b>Expected Return Models and Market Data</b>
<b>Means of Assessing The Market Risk Premium</b>	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
<b>Problems/Debated Issues</b>	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).



CAPM Study

Market Risk Premium Results - 2010-2023

Category	Study Authors	Publication Date	Time Period Of Study	Methodology	Return Measure	Range		Midpoint of Range	Mean	Average
						Low	High			
<b>Historical Risk Premium</b>										
	Ibbotson	2016	1928-2015	Historical Stock Returns - Bond Returns	Arithmetic				6.00%	
					Geometric				4.40%	
	Damodaran	2023	1928-2022	Historical Stock Returns - Bond Returns	Arithmetic				6.64%	
					Geometric				5.06%	
	Dimson, Marsh, Staunton_Credit Suisse Report	2023	1900-2022	Historical Stock Returns - Bond Returns	Arithmetic				6.40%	
					Geometric				4.60%	
	Median									5.52%
<b>Ex Ante Models (Puzzle Research)</b>										
	Siegel - Rethink ERP	2011	Projection	Real Stock Returns and Components					5.50%	
	Kroll (Duff & Phelps)	2023	Projection	Normalized with 3.5% Long-Term Treasury Yield					5.50%	
	Mschowski - 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%	
	JP Morgan Asset Management	2023	Projection	Equity Return of 7.90% and Long-Term Bond of 3.50%					4.40%	
	Market Risk Premia - 6-1-23	2023	Projection	Fundamental Economic and Market Factors					3.32%	
	KPMG	2023	Projection	Fundamental Economic and Market Factors					5.25%	
	Damodaran - 8-1-23	2023	Projection	Fundamentals - Implied from FCF to Equity Model (Trailing 12 month, with adjusted payout)					4.41%	
	Median									5.38%
<b>Surveys</b>										
	New York Fed	2015	Five-Year	Survey of Wall Street Firms					5.70%	
	Survey of Financial Forecasters	2023	10-Year Projection	Equity Return of 7.50% and Long-Term Bond of 3.35%					3.15%	
	Duke - CFO Magazine Survey	2023	10-Year Projection	Approximately 200 CFOs Expected S&P 500 Return of 8.4% and Risk-Free Rate of 3.5%					4.90%	
	Fernandez - Academics, Analysts, and Companies	2023	Long-Term	Survey of Academics, Analysts, and Companies					5.70%	
	Median									5.30%
<b>Building Block</b>										
	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%		
	Median									4.06%
<b>Mean</b>										<b>5.06%</b>
<b>Median</b>										<b>5.34%</b>

CAPM Study

Kroll (Duff & Phelps) Equity Risk Premium Estimates



**Kroll Recommended  
 U.S. Equity Risk Premium (ERP) and  
 Corresponding Risk-free Rates ( $R_f$ );  
 January 2008–Present**

For additional information, please visit  
[kroll.com/cost-of-capital/resource-center](https://kroll.com/cost-of-capital/resource-center)

Date	Risk-free Rate ( $R_f$ )	$R_f$ (%)	Kroll Recommended U.S. ERP (%)	What Changed
<b>Current Guidance:</b>				
June 8, 2023 – UNTIL FURTHER NOTICE*	Normalized 20-year U.S. Treasury yield*	3.50*	5.50	ERP
October 18, 2022 – June 7, 2023	Normalized 20-year U.S. Treasury yield	3.50	6.00	ERP
June 16, 2022 – October 17, 2022	Normalized 20-year U.S. Treasury yield	3.50	5.50	Rf
April 7, 2022 – June 15, 2022	Normalized 20-year U.S. Treasury yield	3.00	5.50	Rf
December 7, 2020 – April 6, 2022	Normalized 20-year U.S. Treasury yield	2.50	5.50	ERP
June 30, 2020 – December 6, 2020	Normalized 20-year U.S. Treasury yield	2.50	6.00	Rf
March 25, 2020 – June 29, 2020	Normalized 20-year U.S. Treasury yield	3.00	6.00	ERP
December 19, 2019 – March 24, 2020	Normalized 20-year U.S. Treasury yield	3.00	5.00	ERP
September 30, 2019 – December 18, 2019	Normalized 20-year U.S. Treasury yield	3.00	5.50	$R_f$
December 31, 2018 – September 29, 2019	Normalized 20-year U.S. Treasury yield	3.50	5.50	ERP
September 5, 2017 – December 30, 2018	Normalized 20-year U.S. Treasury yield	3.50	5.00	ERP
November 15, 2016 – September 4, 2017	Normalized 20-year U.S. Treasury yield	3.50	5.50	$R_f$
January 31, 2016 – November 14, 2016	Normalized 20-year U.S. Treasury yield	4.00	5.50	ERP
December 31, 2015	Normalized 20-year U.S. Treasury yield	4.00	5.00	
December 31, 2014	Normalized 20-year U.S. Treasury yield	4.00	5.00	
December 31, 2013	Normalized 20-year U.S. Treasury yield	4.00	5.00	
February 28, 2013 – January 30, 2016	Normalized 20-year U.S. Treasury yield	4.00	5.00	ERP
December 31, 2012	Normalized 20-year U.S. Treasury yield	4.00	5.50	
January 15, 2012 – February 27, 2013	Normalized 20-year U.S. Treasury yield	4.00	5.50	ERP
December 31, 2011	Normalized 20-year U.S. Treasury yield	4.00	6.00	
September 30, 2011 – January 14, 2012	Normalized 20-year U.S. Treasury yield	4.00	6.00	ERP
July 1 2011 – September 29, 2011	Normalized 20-year U.S. Treasury yield	4.00	5.50	$R_f$
June 1, 2011 – June 30, 2011	Spot 20-year U.S. Treasury yield	Spot	5.50	$R_f$
May 1, 2011 – May 31, 2011	Normalized 20-year U.S. Treasury yield	4.00	5.50	$R_f$
December 31, 2010	Spot 20-year U.S. Treasury yield	Spot	5.50	
December 1, 2010 – April 30, 2011	Spot 20-year U.S. Treasury yield	Spot	5.50	$R_f$
June 1, 2010 – November 30, 2010	Normalized 20-year U.S. Treasury yield	4.00	5.50	$R_f$
December 31, 2009	Spot 20-year U.S. Treasury yield	Spot	5.50	
December 1, 2009 – May 31, 2010	Spot 20-year U.S. Treasury yield	Spot	5.50	ERP
June 1, 2009 – November 30, 2009	Spot 20-year U.S. Treasury yield	Spot	6.00	$R_f$
December 31, 2008	Normalized 20-year U.S. Treasury yield	4.50	6.00	
November 1, 2008 – May 31, 2009	Normalized 20-year U.S. Treasury yield	4.50	6.00	$R_f$
October 27, 2008 – October 31, 2008	Spot 20-year U.S. Treasury yield	Spot	6.00	ERP
January 1, 2008 – October 26, 2008	Spot 20-year U.S. Treasury yield	Spot	5.00	Initialized

\* We recommend using the spot 20-year U.S. Treasury yield as the proxy for the risk-free rate, if the prevailing yield as of the valuation date is higher than our recommended U.S. normalized risk-free rate of 3.5%. This guidance is effective when developing USD-denominated discount rates as of June 16, 2022 and thereafter.

\*Normalized\* in this context means that in months where the risk-free rate is deemed to be abnormally low, a proxy for a longer-term sustainable risk-free rate is used.

Exhibit JRW-9

PacifiCorp's Rate of Return Recommendation

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	48.72%	4.77%	2.32%
Preferred Stock	0.01%	6.75%	0.00%
<u>Common Equity</u>	<u>51.27%</u>	<u>10.30%</u>	<u>5.28%</u>
Total	100.00%		7.61%

**Bulkley ROE Results**

<i>Constant Growth DCF</i>			
	Mean Low	Mean	Mean High
30-Day Average	8.11%	9.40%	10.39%
90-Day Average	8.25%	9.54%	10.53%
180-Day Average	8.14%	9.44%	10.42%
Constant Growth Average	8.17%	9.46%	10.45%
<i>CAPM</i>			
	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
Value Line Beta	11.36%	11.37%	11.38%
Bloomberg Beta	10.77%	10.79%	10.81%
Long-term Avg. Beta	10.33%	10.36%	10.38%
<i>ECAPM</i>			
Value Line Beta	11.64%	11.65%	11.66%
Bloomberg Beta	11.20%	11.22%	11.23%
Long-term Avg. Beta	10.87%	10.89%	10.91%
<i>Risk Premium</i>			
	Current 30-day Average Treasury Bond Yield	Near-Term Blue Chip Forecast Yield	Long-Term Blue Chip Forecast Yield
Risk Premium Results	10.23%	10.28%	10.32%
<i>Expected Earnings</i>			
	Mean	Median	
Expected Earnings Results	11.25%	11.31%	

**Investment Firms' Expected U.S. Large Cap Equity Market Annual Returns**  
12/31/2022

<b>Investment Firm</b>	<b>AUM (\$ in Bn) 12/31/2022</b>	<b>Duration of Forecast 5-, 10-,20- Year</b>	<b>Expected Return US Large Cap Equities</b>
AQR	\$100.00	5-10 Years	5.70%
Allianz	\$1,782.64	10 Years	7.50%
Bar's	\$468.22	10 Years	7.80%
BlackRock	\$8,600.00	10 Years	7.90%
BNY Mellon	\$1,800.00	10 Years	6.40%
Callan	\$15.42	10 Years	7.25%
Capital Group	\$2,300.00	20 Years	7.20%
Citi	\$250.00	10 Years	9.50%
Cresset	\$30.00	10 Years	7.00%
Fidelity	\$3,876.00	20 Years	4.00%
Franklin Templeton	\$1,300.00	10 Years	7.90%
Invesco	\$1,409.20	10 Years	7.70%
Janney Montgomery	\$2.90	10 Years	7.50%
JPMorgan	\$2,760.00	10 - 15 Years	7.90%
Mackenzie	\$192.20	10 Years	8.20%
Morgan Stanley	\$1,300.00	7 Years	4.60%
Morningstar	\$253.60	-	7.40%
Neuberger Bergman	\$427.00	20 Years	5.79%
Northern Trust	\$1,000.00	5 Years	6.00%
Nuveen	\$1,100.00	10 Years	6.96%
PGIM	\$1,200.00	10 Years	7.76%
PIMCO	\$1,740.00	5 Years	6.80%
RBC	\$389.00	10 Years	7.85%
RVK	\$1.30	20 Years	6.75%
Schroeder	\$915.53	10 Years	9.10%
Schwab	\$755.00	10 Years	6.10%
State Street	\$3,500.00	10 Years	6.60%
T-Rowe Price	\$1,275.00	5 Years	4.90%
UBS	\$3,960.00	5 Years	4.90%
Vanguard	\$7,200.00	10 Years	5.30%
Voya	\$321.00	10 Years	6.75%
<b>Sum/Average</b>	<b>\$50,224.01</b>	<b>10 Years</b>	<b>6.87%</b>

Data Source: Company websites. Source documents provided in work papers.



GDP and S&P 500 Growth Rates

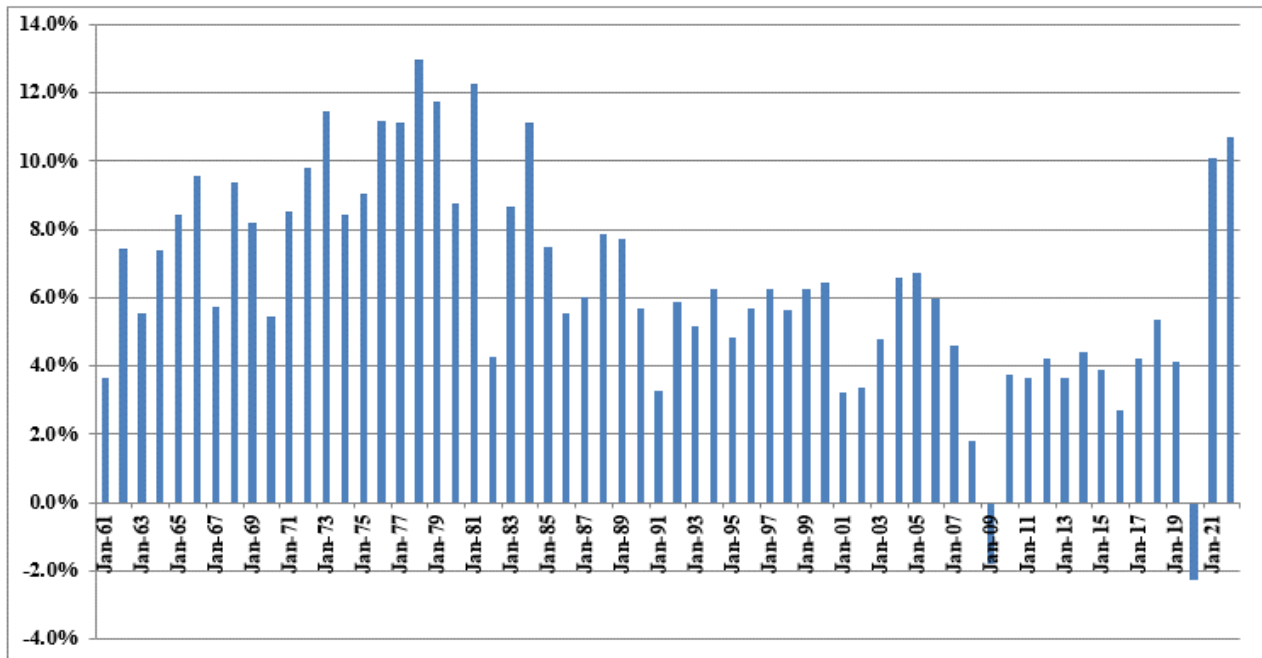
Growth Rates  
 GDP, S&P 500 Price, EPS, and DPS

	GDP	S&P 500	S&P 500 EPS	S&P 500 DPS	
1960	542.38	58.11	3.10	1.98	
1961	562.21	71.55	3.37	2.04	
1962	603.92	63.10	3.67	2.15	
1963	637.45	75.02	4.13	2.35	
1964	684.46	84.75	4.76	2.58	
1965	742.29	92.43	5.30	2.83	
1966	813.41	80.33	5.41	2.88	
1967	859.96	96.47	5.46	2.98	
1968	940.65	103.86	5.72	3.04	
1969	1,017.62	92.06	6.10	3.24	
1970	1,073.30	92.15	5.51	3.19	
1971	1,164.85	102.09	5.57	3.16	
1972	1,279.11	118.05	6.17	3.19	
1973	1,425.38	97.55	7.96	3.61	
1974	1,545.24	68.56	9.35	3.72	
1975	1,684.90	90.19	7.71	3.73	
1976	1,873.41	107.46	9.75	4.22	
1977	2,081.83	95.10	10.87	4.86	
1978	2,351.60	96.11	11.64	5.18	
1979	2,627.33	107.94	14.55	5.97	
1980	2,857.31	135.76	14.99	6.44	
1981	3,207.04	122.55	15.18	6.83	
1982	3,343.79	140.64	13.82	6.93	
1983	3,634.04	164.93	13.29	7.12	
1984	4,037.61	167.24	16.84	7.83	
1985	4,338.98	211.28	15.68	8.20	
1986	4,579.63	242.17	14.43	8.19	
1987	4,855.22	247.08	16.04	9.17	
1988	5,236.44	277.72	24.12	10.22	
1989	5,641.58	353.40	24.32	11.73	
1990	5,963.14	330.22	22.65	12.35	
1991	6,158.13	417.09	19.30	12.97	
1992	6,520.33	435.71	20.87	12.64	
1993	6,858.56	466.45	26.90	12.69	
1994	7,287.24	459.27	31.75	13.36	
1995	7,639.75	615.93	37.70	14.17	
1996	8,073.12	740.74	40.63	14.89	
1997	8,577.55	970.43	44.09	15.52	
1998	9,062.82	1,229.23	44.27	16.20	
1999	9,631.17	1,469.25	51.68	16.71	
2000	10,250.95	1,320.28	56.13	16.27	
2001	10,581.93	1,148.09	38.85	15.74	
2002	10,929.11	879.82	46.04	16.08	
2003	11,456.45	1,111.91	54.69	17.88	
2004	12,217.20	1,211.92	67.68	19.407	
2005	13,039.20	1,248.29	76.45	22.38	
2006	13,815.58	1,418.30	87.72	25.05	
2007	14,474.23	1,468.36	82.54	27.73	
2008	14,769.86	903.25	65.39	28.05	
2009	14,478.07	1,115.10	59.65	22.31	
2010	15,048.97	1,257.64	83.66	23.12	
2011	15,599.73	1,257.60	97.05	26.02	
2012	16,253.97	1,426.19	102.47	30.44	
2013	16,843.20	1,848.36	107.45	36.28	
2014	17,550.69	2,058.90	113.01	39.44	
2015	18,206.02	2,043.94	106.32	43.16	
2016	18,695.11	2,238.83	108.86	45.03	
2017	19,479.62	2,673.61	124.94	49.73	
2018	20,527.16	2,506.85	148.34	53.61	
2019	21,372.58	3,230.78	162.35	58.80	
2020	20,893.75	3,756.07	139.76	56.70	
2021	22,997.50	4,766.18	206.38	59.20	Average
2022	25,461.34	3,839.50	219.49	68.34	
<b>Growth Rates</b>	<b>6.40%</b>	<b>6.99%</b>	<b>7.11%</b>	<b>5.88%</b>	<b>6.60%</b>

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

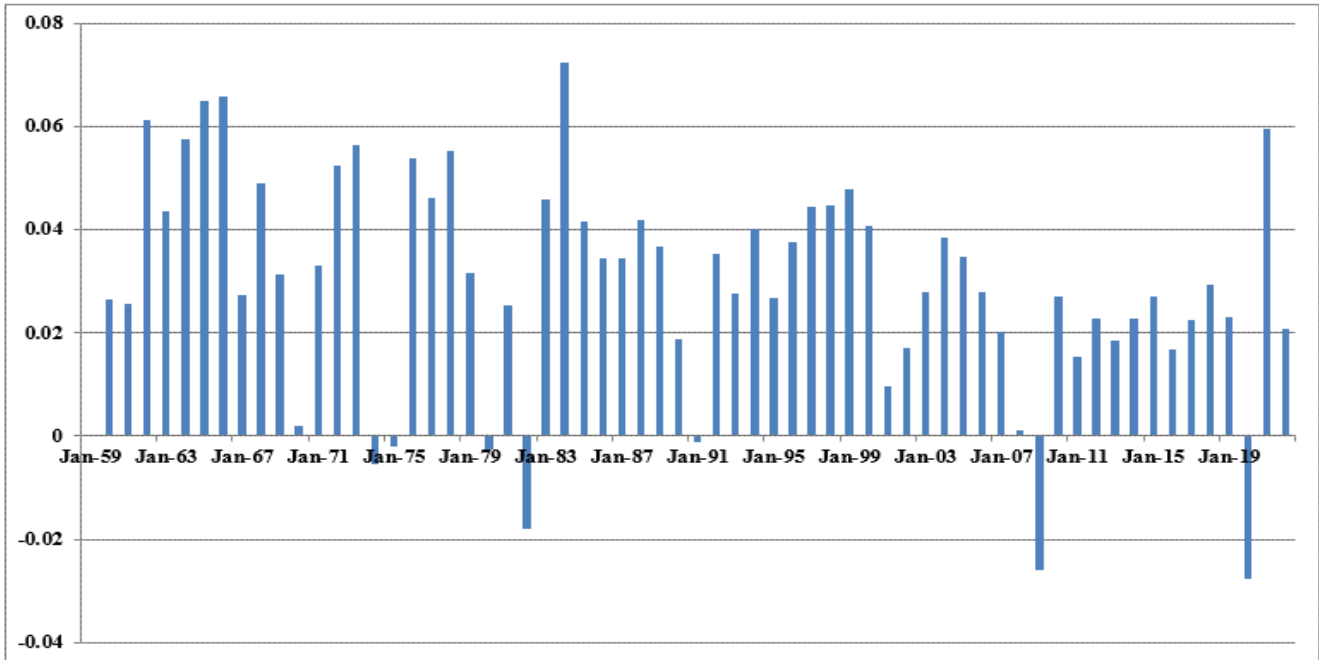
Annual Nominal GDP Growth Rates

Annual Growth Rates - 1961-2022



Data Sources: GDPA -<https://fred.stlouisfed.org/series/GDPA>

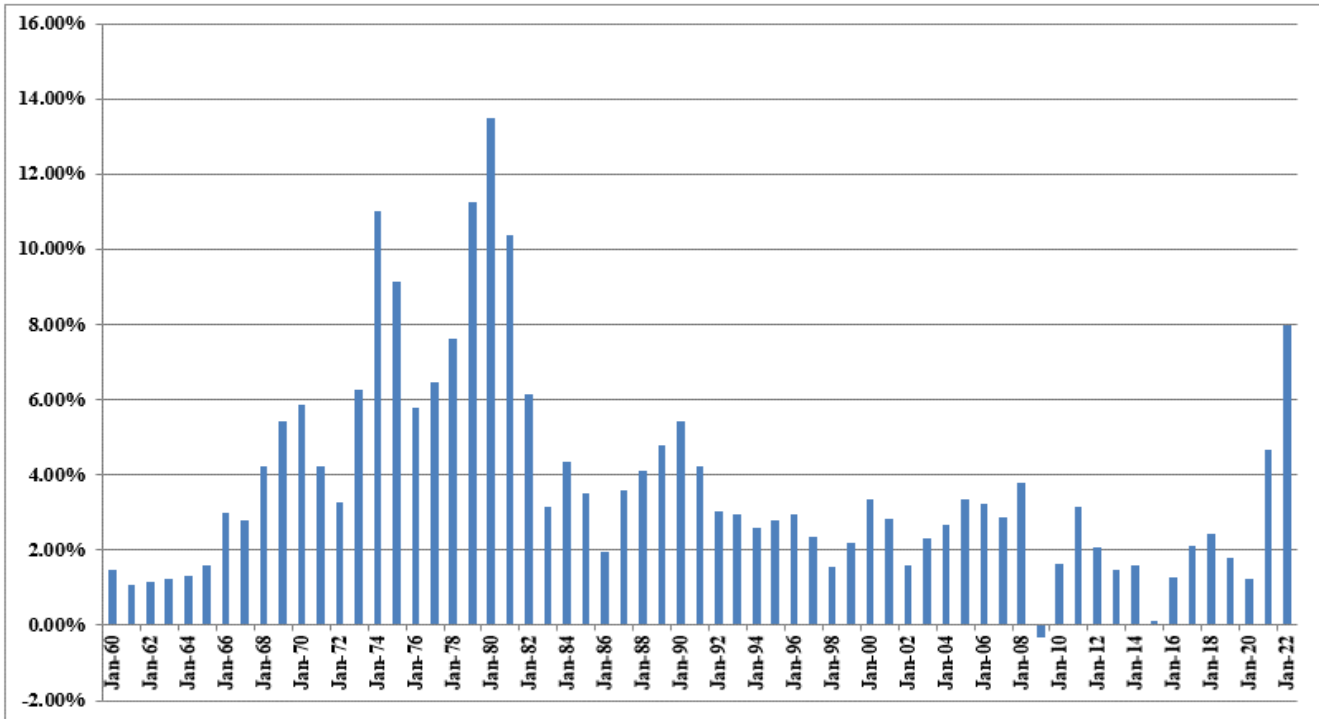
Real GDP Growth Rates  
Annual Average Real GDP Growth Rates  
1961-2022



Data Sources: GDPC1 - <https://fred.stlouisfed.org/series/GDPCA>

### Inflation Rates

#### Annual Inflation Rates 1961-2022



Data Sources: CPIAUCSL - <https://fred.stlouisfed.org/series/CPIAUCSL>

**Projected Nominal GDP Growth Rates**

**Panel A  
 Historic GDP Growth Rates**

<b>10-Year Average</b>	<b>4.59%</b>
<b>20-Year Average</b>	<b>4.32%</b>
<b>30-Year Average</b>	<b>4.65%</b>
<b>40-Year Average</b>	<b>5.21%</b>
<b>50-Year Average</b>	<b>6.16%</b>

Calculated using GDP data on Page 1 of Exhibit JRW-11

**Panel B  
 Projected GDP Growth Rates**

	<b>Time Frame</b>	<b>Projected Nominal GDP Growth Rate</b>
<b>Congressional Budget Office</b>	<b>2023-2053</b>	<b>3.8%</b>
<b>Survey of Financial Forecasters</b>	<b>Ten Year</b>	<b>4.4%</b>
<b>Social Security Administration</b>	<b>2023-2100</b>	<b>4.1%</b>
<b>Energy Information Administration</b>	<b>2023-2050</b>	<b>4.3%</b>
<b>Sources:</b>	<b>Average</b>	<b>4.15%</b>

Congressional Budget Office, *The 2023 Long-Term Budget Outlook*, July 15, 2023.  
 U.S. Energy Information Administration, *Annual Energy Outlook 2023*, Table: Macroeconomic Indicators,  
 Social Security Administration, 2023 Annual Report of the Board of Trustees of the Old-Age,  
 Survivors, and Disability Insurance (OASDI) Program, Table VI.G4,  
 The 4.1% growth rate is the growth in projected GDP from 26 trillion in 2023 to \$582 trillion in 2100.  
<https://www.philadelphiafed.org/research-and-data/real-time-center/survey-of-professional-forecasters/>

### GDP and S&P 500 Growth Rates

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

