

**BEFORE THE WASHINGTON
UTILITIES & TRANSPORTATION COMMISSION**

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PACIFICORP D/B/A PACIFIC POWER & LIGHT COMPANY,

Respondent.

DOCKETS UE-230172

**J. RANDALL WOOLRDIGE, PH.D.
ON BEHALF OF THE
WASHINGTON STATE OFFICE OF THE ATTORNEY GENERAL
PUBLIC COUNSEL UNIT**

EXHIBIT JRW-7

Discounted Cash Flow (DCF) Study

September 14, 2023

Exhibit JRW-7

PacifiCorp
Discounted Cash Flow Analysis

Panel A
Electric Proxy Group

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

* 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

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

* 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 Yields

Panel 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&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&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
Evergy, Inc. (NYSE-EVRG)						
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
Evergy, Inc. (NYSE-EVRG)						
IDACORP, Inc. (NYSE-IDA)	4.0	8.5	5.0	4.0	6.5	4.5
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&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&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%