

Application No. 18-04-002
Exhibit PAC/1506
Witness: Kurt G. Strunk

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

PACIFICORP

Exhibit Accompanying Rebuttal Testimony of
Kurt G. Strunk
PacifiCorp California Proxy Group Sustainable Growth

November 2018

PacifiCorp California
Proxy Group
Sustainable Growth: SV Estimation

Company	Ticker	Growth Rate of Common Shares Outstanding (S) ¹										Average S ²	Adjusted Stock Price ³	V ⁴	S*V
		2013	2014	2015	2016	2017	2017	2017	2017	2017	2017				
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i) = 1 - (g)/(h)	(j) = (f)*(i)				
1 ALLETE, Inc.	ALE	5.1%	10.9%	7.0%	1.0%	3.0%	5.39%	\$40.47	\$76.58	47.15%	2.54%				
2 Alliant Energy Corporation	LNT	0.0%	0.0%	2.3%	0.3%	1.6%	0.84%	\$18.08	\$43.75	58.67%	0.49%				
3 Ameren Corporation	AEE	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	\$29.61	\$65.86	55.04%	0.00%				
4 American Electric Power Company, Inc.	AEP	0.4%	0.3%	0.3%	0.1%	0.1%	0.26%	\$37.17	\$72.77	48.92%	0.13%				
5 Avangrid, Inc.	AGR				0.0%	0.0%	0.02%	\$48.75	\$48.41	-0.69%	0.00%				
6 Avista Corporation	AVA	0.5%	3.6%	0.1%	3.0%	2.0%	1.84%	\$26.41	\$51.63	48.85%	0.90%				
7 CMS Energy Corporation	CMS	0.8%	3.4%	0.7%	0.7%	0.9%	1.30%	\$15.77	\$50.37	68.69%	0.89%				
8 Consolidated Edison, Inc.	ED	0.0%	0.0%	0.0%	4.1%	1.6%	1.16%	\$49.74	\$76.86	35.28%	0.41%				
9 DTE Energy Company	DTE	2.8%	-0.1%	1.4%	0.0%	0.0%	0.81%	\$53.03	\$112.60	52.90%	0.43%				
10 Duke Energy Corporation	DUK	0.3%	0.1%	-2.7%	1.7%	0.0%	-0.10%	\$59.63	\$82.12	27.38%	-0.03%				
11 Edison International	EIX	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	\$35.82	\$70.16	48.95%	0.00%				
12 El Paso Electric Company	EE	0.4%	0.2%	0.2%	0.2%	0.1%	0.23%	\$28.14	\$59.44	52.65%	0.12%				
13 Eversource Energy	ES	0.4%	0.5%	0.1%	-0.1%	0.0%	0.18%	\$34.99	\$63.17	44.61%	0.08%				
14 Fortis Inc.	FTS	11.3%	29.5%	2.0%	42.5%	5.0%	18.04%	\$31.77	\$32.22	1.39%	0.25%				
15 IDACORP, Inc.	IDA	0.1%	0.1%	0.1%	0.1%	0.0%	0.10%	\$44.65	\$97.73	54.31%	0.05%				
16 NextEra Energy, Inc.	NEE	2.6%	1.8%	4.1%	1.5%	0.6%	2.13%	\$59.89	\$172.83	65.35%	1.39%				
17 OGE Energy Corp.	OGE	0.5%	0.5%	0.2%	0.0%	0.0%	0.21%	\$19.28	\$37.39	48.44%	0.10%				
18 PG&E Corporation	PCG	6.0%	4.2%	3.4%	3.0%	1.6%	3.64%	\$37.34	\$46.58	19.83%	0.72%				
19 Pinnacle West Capital Corporation	PNW	0.4%	0.4%	0.4%	0.3%	0.4%	0.36%	\$44.80	\$84.53	47.00%	0.17%				
20 PNM Resources, Inc.	PNM	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%	\$21.28	\$40.06	46.88%	0.00%				
21 Portland General Electric Company	POR	3.3%	0.2%	13.5%	0.2%	0.2%	3.48%	\$27.11	\$46.80	42.07%	1.46%				
22 PPL Corporation	PPL	8.3%	5.6%	1.2%	0.9%	2.0%	3.61%	\$15.52	\$31.03	49.98%	1.80%				
23 Public Service Enterprise Group Incorporated	PEG	0.0%	0.0%	-0.1%	-0.1%	0.0%	-0.04%	\$27.42	\$54.67	49.84%	-0.02%				
24 WEC Energy Group, Inc.	WEC	-1.3%	-0.2%	40.0%	0.0%	0.0%	7.68%	\$29.98	\$70.16	57.27%	4.40%				
25 Xcel Energy Inc.	XEL	2.1%	1.6%	0.4%	-0.1%	0.1%	0.80%	\$22.56	\$48.98	53.94%	0.43%				
Average		1.82%	2.61%	3.10%	2.38%	0.77%	2.08%	\$34.37	\$65.47	44.99%	0.67%				

Notes:

¹ Source: *The Value Line Investment Survey: August 17, 2018, September 14, 2018, October 26, 2018.*

² Average common shares outstanding growth rate for 2013-2017.

³ Source: Bloomberg Financial, L.P., October 19, 2018.

⁴ V is the adjusted stock price relative to the book value. 1 - (Book Value per Share/Adjusted Stock Price).

**PacifiCorp California
Proxy Group
Sustainable Growth: BR + SV**

Company	Ticker	R ¹		V _e		V		R _{av} ² Return on Average Equity	B ³	B*R ⁴	S*V ⁵	B*R*S*V
		Estimated Return on Common Equity		Estimated Book Value/Share		Book Value/Share						
		2021-2023 Common Equity	2021-2023 Share	2021-2023 Value/Share	2021-2023 Value/Share	2017 Value/Share	2018 Value/Share					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)			
1 ALLETE, Inc.	ALE	9.0%	\$2.70	\$47.25	\$40.47	\$41.70	0.37	9.1%	0.37	3.3%	2.5%	5.88%
2 Alliant Energy Corporation	LNT	11.5%	\$1.66	\$22.85	\$18.08	\$19.00	0.37	11.8%	0.37	4.3%	0.5%	4.83%
3 Ameren Corporation	AEE	10.5%	\$2.35	\$37.75	\$29.61	\$31.25	0.41	10.8%	0.41	4.4%	0.0%	4.39%
4 American Electric Power Company, Inc.	AEP	10.5%	\$3.05	\$46.75	\$37.17	\$38.65	0.38	10.7%	0.38	4.1%	0.1%	4.18%
5 Avangrid, Inc.	AGR	6.0%	\$2.20	\$53.00	\$48.75	\$49.25	0.31	6.0%	0.31	1.9%	0.0%	1.86%
6 Avista Corporation	AVA	9.0%	\$1.75	\$31.00	\$26.41	\$27.30	0.37	9.1%	0.37	3.4%	0.9%	4.31%
7 CMS Energy Corporation	CMS	14.0%	\$1.85	\$22.50	\$15.77	\$16.95	0.41	14.5%	0.41	6.0%	0.9%	6.88%
8 Consolidated Edison, Inc.	ED	8.5%	\$3.30	\$58.00	\$49.74	\$51.70	0.33	8.7%	0.33	2.9%	0.4%	3.27%
9 DTE Energy Company	DTE	11.0%	\$4.55	\$69.50	\$53.03	\$56.20	0.40	11.3%	0.40	4.6%	0.4%	5.01%
10 Duke Energy Corporation	DUK	8.5%	\$4.40	\$65.50	\$59.63	\$60.60	0.21	8.6%	0.21	1.8%	0.0%	1.77%
11 Edison International	EIX	13.0%	\$3.10	\$44.00	\$35.82	\$37.00	0.46	13.2%	0.46	6.1%	0.0%	6.05%
12 El Paso Electric Company	EE	9.0%	\$1.85	\$34.00	\$28.14	\$29.30	0.40	9.2%	0.40	3.6%	0.1%	3.75%
13 Eversource Energy	ES	9.5%	\$2.50	\$42.00	\$34.99	\$36.20	0.37	9.7%	0.37	3.6%	0.1%	3.69%
14 Fortis Inc.	FTS	8.5%	\$2.20	\$41.50	\$31.77	\$33.50	0.38	8.7%	0.38	3.3%	0.3%	3.53%
15 IDACORP, Inc.	IDA	9.0%	\$3.05	\$53.50	\$44.65	\$46.55	0.37	9.2%	0.37	3.4%	0.1%	3.42%
16 NextEra Energy, Inc.	NEE	13.0%	\$6.60	\$80.50	\$59.89	\$68.70	0.37	13.9%	0.37	5.1%	1.4%	6.52%
17 OGE Energy Corp.	OGE	11.5%	\$1.85	\$22.75	\$19.28	\$19.95	0.29	11.7%	0.29	3.4%	0.1%	3.53%
18 PG&E Corporation	PCG	8.5%	\$2.00	\$52.00	\$37.34	\$37.95	0.55	8.6%	0.55	4.7%	0.7%	5.41%
19 Pinnacle West Capital Corporation	PNW	10.0%	\$3.50	\$53.25	\$44.80	\$44.65	0.34	10.0%	0.34	3.4%	0.2%	3.59%
20 PNM Resources, Inc.	PNM	9.5%	\$1.35	\$27.25	\$21.28	\$22.00	0.48	9.7%	0.48	4.6%	0.0%	4.62%
21 Portland General Electric Company	POR	9.0%	\$1.80	\$31.75	\$27.11	\$27.95	0.37	9.1%	0.37	3.4%	1.5%	4.84%
22 PPL Corporation	PPL	13.0%	\$1.80	\$21.00	\$15.52	\$17.10	0.34	13.6%	0.34	4.6%	1.8%	6.45%
23 Public Service Enterprise Group Incorporated	PEG	11.0%	\$2.20	\$34.75	\$27.42	\$28.70	0.42	11.3%	0.42	4.8%	0.0%	4.76%
24 WEC Energy Group, Inc.	WEC	12.0%	\$2.75	\$35.50	\$29.98	\$31.00	0.35	12.2%	0.35	4.3%	4.4%	8.72%
25 Xcel Energy Inc.	XEL	10.5%	\$1.90	\$28.00	\$22.56	\$23.85	0.35	10.8%	0.35	3.8%	0.4%	4.25%
Average		10.22%	\$2.65	\$42.23	\$34.37	\$35.88	0.38	10.46%	0.38	3.95%	0.67%	4.62%

Notes:

¹ Estimated future return on common equity, dividends per share, and book value per share as reported in August 17, 2018, September 14, 2018, October 26, 2018.

² Rav=R¹[(2*V16)/(V15+V16)]. This formula transforms the end-of-year projected Value Line return on equity into a mid-year return on equity.

³ B=1-(De/(R*Ve)).

⁴ B*R=B*Rav.

⁵ S*V equals the five year average of S, multiplied by current V, where S = annual growth rate of common shares outstanding and V = fraction of new funds provided that accrues to original shareholders.