

Attachment 1

Educational and Professional Background

Leszek Stachow

I am employed by the New Hampshire Public Utilities Commission (Commission) as a Utility Analyst. My business address is 21 S. Fruit Street, Suite 10, Concord, New Hampshire, 03301.

I am a graduate of the following institutions of higher learning: University of Keele, Keele, Staffordshire, United Kingdom, from which I received a BA Triple Honors in Economics, Politics and History, and subsequently from the University of Sussex, Brighton, United Kingdom, from which I received a Masters in Political Economy.

While pursuing a PhD at University of Massachusetts in Cambridge, Mass, I concurrently served as a faculty member at St. Anselm College, NH and adjunct faculty at the Whittemore School of Business and Economics of the University of New Hampshire where I taught regulatory economics. In 1987 I joined the Economics department of the NHPUC where I primarily supported rate cases in the telecommunications and energy sectors .

In 1992, I was appointed regional manager for Central Europe on behalf of management consulting firm, Booz Allen & Hamilton. In that capacity I advised numerous government agencies in Central and Eastern Europe, the Middle East, Africa and Latin America on optimizing the functioning of energy, telecommunications, water/waste water and gas sector regulatory bodies and markets.

In 2004, I was employed by Camp Dresser McKee to develop their Central European engineering consulting business. Beyond a primary focus on mergers and acquisitions, I was appointed President and manager of CDM Poland, as well as director of CDM AG in Germany.

I returned to the Commission in 2010, where I initially supported the telecommunications division and latterly the gas and electric divisions.

In 1988, I completed the NARUC Annual Regulatory Studies Program at Michigan State University, sponsored by the National Association of Regulatory Utility Commissioners as well as sundry other targeted regulatory courses.

Attachment 2

Customer base, jurisdictions served, activities performed, own generation, operating revenues and percentage electric revenues for the Proxy Group of companies

Company	Customers served	States served	Range of activities	Profile	Operating Rev(\$mil)	Percentage Electrical revenue
American Electric Power Co, Inc	5.3m	10	Generation, transmission & distribution of electricity, river operations	38,000MW generated, min 8 subsidiaries, Revenues from utility operations: \$13,778(mil)	15,011.0	95
CenterPoint Energy Inc	5.0m	6	Vertically integrated electric, gas , field services, interstate pipelines	61% operating income from electrical T&D(2012) 19% operating income from natural gas distribution Min 4 subsidiaries	7,452	26
CLECO Corp	283,000	1	Vertically integrated regional energy cpy,with generation, transmission and distribution, plus wholesale energy business	2,565MW Generation, midstream wholesale, Distribution. Min 2 subsidiaries	1,086.4	94
Consolidated Edison	3.0 million	4	Electrical, gas and steam distribution service	Distribution of gas and electric Min 5 subsidiaries	12,666.0	70
Empire District Electric Cpy	167,000	4	Primarily distribution for electric gas & water	1,391 MW	0.577	91.7
Great Plains Energy Inc	825,000	4	Holding cpy with vertically integrated generation, transmission and	6,600 MW Min 3 subsidiaries	2,304.8	100

			distribution operations			
Hawaiian Energy Industries, Inc	450,000	1	Vertically integrated, engaged in gen, trans , distribution of electricity	2,400 MW Min 3 subsidiaries	3,346.6	92
IDACORP, Inc	500,000	5	Vertically integrated engaged in gen, trans, distribution of electricity	3,594 MW Min 3 subsidiaries	1,016.4	100
Northeast Utilities	3.5 m	3+	Primarily transmission and distribution operations in gas and electric	Min 6 subsidiaries	6.273.8	75
Otter Tail Corp	128,000	3	Primarily electric distribution, manufacturing, infrastructure	798 MW Min 7 subsidiaries	0.859	41
Pepco Holdings	2.00 m	4+	Primarily electric transmission and distribution with some gas distribution, and other near energy related industries	Min 5 subsidiaries	5,578.0	76
Pinnacle West Capital Corp	1.1 m	2	Holding company of Arizona Public Service with generation, transmission and distribution operations	6,370 MW Min 3 subsidiary	3,213.2	100
PNM Resources, Inc	739,000	2	Vertically integrated utility with generation, transmission and distribution	2,538 MW Min 2 subsidiaries	1,618.3	80
Portland General Electric Cpy	836,000	1	Vertically integrated electric utility with generation, transmission and distribution	2,783 MW Min 1 subsidiaries	1,808	100
Southern Company	4.4 m	4	SO owns vertically integrated electric utilities in 4 states, , generating business, fiber optics, wireless communications,	46,000 MW Min 5 subsidiaries	17,249.0	95

UIL Holdings	700,000	2+	Holding company for diversified electric and gas distribution operations	Min 4 subsidiaries	1,467.7	54
Westar Energy, Inc	690,000	2	Largest electric utility in KS, providing generation, <u>transmission</u> and distribution service	7,200 MW Min 2 subsidiaries	2,164.9	100
Granite State	42,697	1	Liberty Energy owned Electrical distribution company only in NH	No generation capability	78.9	100%
CALPECO	?	1	Liberty Utility owned? Electrical distribution company only in Calif	No generation capability	N/a	N/a

Attachment 3**Range of ROE authorizations approved for electric utilities between 2011-2013(October from SNL)**

ROE range	2011	2012	2013
9.00-9.99	8	22	17
10.00-10.24	17	11	6
10.25-10.50	10	19	2
>10.50	7	6	5

Attachment 4

Staff revised Constant growth DCF analysis for all proxy companies excluding Otter Tail, and excluding the Sustainable growth estimate

Constant Growth Discounted Cash Flow Model													
90 Day Average Stock Price													
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Sustainable Growth Estimate	Average Earnings Growth	Low ROE	Mean ROE	High ROE
American Electric Power Company, Inc.	AEP	\$1.88	\$45.05	4.17%	4.24%	3.40%	3.09%	3.00%		3.16%	7.24%	7.40%	7.64%
CenterPoint Energy, Inc.	CNP	\$0.81	\$23.98	3.38%	3.47%	5.70%	5.53%	5.00%		5.41%	8.46%	8.88%	9.17%
Cleco Corp.	CNL	\$1.35	\$45.54	2.96%	3.03%	3.00%	3.00%	8.00%		4.67%	6.01%	7.70%	11.08%
Consolidated Edison, Inc.	ED	\$2.42	\$56.99	4.25%	4.31%	3.00%	2.41%	4.00%		3.14%	6.71%	7.45%	8.33%
Empire District Electric	EDE	\$1.00	\$21.97	4.55%	4.73%	N/A	10.20%	5.50%		7.85%	10.18%	12.58%	14.98%
Great Plains Energy Inc.	GXP	\$0.87	\$22.74	3.83%	3.95%	7.10%	7.20%	5.50%		6.60%	9.43%	10.55%	11.16%
Hawaiian Electric Industries, Inc.	HE	\$1.24	\$25.87	4.79%	4.98%	6.30%	7.70%	9.00%		7.67%	11.24%	12.64%	14.01%
IDACORP, Inc.	IDA	\$1.52	\$49.59	3.07%	3.12%	4.00%	4.00%	2.00%		3.33%	5.10%	6.45%	7.13%
Northeast Utilities	NU	\$1.37	\$41.89	3.28%	3.39%	7.10%	5.90%	8.00%		7.00%	9.27%	10.39%	11.41%
Pepco Holdings, Inc.	POM	\$1.08	\$18.96	5.70%	5.85%	4.80%	4.33%	7.00%		5.38%	10.15%	11.23%	12.90%
Pinnacle West Capital Corp.	PNW	\$2.18	\$55.17	3.95%	4.07%	6.90%	6.30%	5.00%		6.07%	9.05%	10.14%	10.99%
PNM Resources, Inc.	PNM	\$0.58	\$22.97	2.53%	2.67%	8.40%	9.30%	16.00%		11.23%	11.03%	13.90%	18.73%
Portland General Electric Company	POR	\$1.08	\$28.81	3.75%	3.82%	4.10%	1.98%	5.50%		3.86%	5.77%	7.68%	9.35%
Southern Company	SO	\$1.96	\$41.20	4.76%	4.88%	5.10%	4.94%	5.00%		5.01%	9.81%	9.89%	9.98%
UIL Holdings Corporation	UIL	\$1.73	\$37.90	4.56%	4.65%	4.00%	4.10%	4.00%		4.03%	8.65%	8.68%	8.75%
Westar Energy, Inc.	WR	\$1.32	\$31.27	4.22%	4.37%	6.40%	7.50%	7.50%		7.13%	10.76%	11.51%	11.88%
PROXY GROUP MEAN				3.98%	4.10%	5.29%	5.47%	6.25%		5.72%	8.68%	9.82%	11.09%
PROXY GROUP MEDIAN				4.06%	4.16%	5.10%	5.24%	5.50%		5.39%	9.16%	10.01%	11.04%

LS/5

Attachment 5

Staff revised Constant growth DCF analysis for the five distribution related proxy companies excluding Otter Tail, and excluding the Sustainable growth estimate

Constant Growth Discounted Cash Flow Model														
90 Day Average Stock Price														
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]		[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Sustainable Growth Estimate	Average Earnings Growth		Low ROE	Mean ROE	High ROE
CenterPoint Energy, Inc.	CNP	\$0.81	\$23.98	3.38%	3.47%	5.70%	5.53%	5.00%		5.41%		8.46%	8.88%	9.17%
Consolidated Edison, Inc.	ED	\$2.42	\$56.99	4.25%	4.31%	3.00%	2.41%	4.00%		3.14%		6.71%	7.45%	8.33%
Northeast Utilities	NU	\$1.37	\$41.89	3.28%	3.39%	7.10%	5.90%	8.00%		7.00%		9.27%	10.39%	11.41%
Pepco Holdings, Inc.	POM	\$1.08	\$18.96	5.70%	5.85%	4.80%	4.33%	7.00%		5.38%		10.15%	11.23%	12.90%
UIL Holdings Corporation	UIL	\$1.73	\$37.90	4.56%	4.65%	4.00%	4.10%	4.00%		4.03%		8.65%	8.68%	8.75%
PROXY GROUP MEAN				4.23%	4.33%	4.92%	4.45%	5.60%		4.99%		8.65%	9.33%	10.11%
PROXY GROUP MEDIAN				4.25%	4.31%	4.80%	4.33%	5.00%		5.38%		8.65%	8.88%	9.17%

Attachment 6

Staff revised Constant growth DCF analysis for the five electric proxy companies excluding the Sustainable growth estimate

Constant Growth Discounted Cash Flow Model														
90 Day Average Stock Price														
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]		[10]	[11]	[12]
Company	Ticker	Annualized Dividend	Average Stock Price	Dividend Yield	Expected Dividend Yield	Zacks Earnings Growth	First Call Earnings Growth	Value Line Earnings Growth	Sustainable Growth Estimate	Average Earnings Growth		Low ROE	Mean ROE	High ROE
Great Plains Energy Inc.	GXP	\$0.87	\$22.74	3.83%	3.95%	7.10%	7.20%	5.50%		6.60%		9.43%	10.55%	11.16%
IDACORP, Inc.	IDA	\$1.52	\$49.59	3.07%	3.12%	4.00%	4.00%	2.00%		3.33%		5.10%	6.45%	7.13%
Pinnacle West Capital Corp.	PNW	\$2.18	\$55.17	3.95%	4.07%	6.90%	6.30%	5.00%		6.07%		9.05%	10.14%	10.99%
Portland General Electric Company	POR	\$1.08	\$28.81	3.75%	3.82%	4.10%	1.98%	5.50%		3.86%		5.77%	7.68%	9.35%
Westar Energy, Inc.	WR	\$1.32	\$31.27	4.22%	4.37%	6.40%	7.50%	7.50%		7.13%		10.76%	11.51%	11.88%
PROXY GROUP MEAN				3.76%	3.87%	5.70%	5.40%	5.10%		5.40%		8.02%	9.27%	10.10%
PROXY GROUP MEDIAN				3.83%	3.95%	6.40%	6.30%	5.50%		6.07%		9.05%	10.14%	10.99%

Attachment 7

Evolution of ROE estimates following various adjustments			
	Low mean	Mean	Mean high
Company 90 day average stock price DCF ROE, proxy group mean	7.9	9.61	11.33
Proxy group median	7.74	9.84	11.25
Removal of all Otter Tail data, mean	7.8	9.6	11.42
Median	7.74	9.8	11.33
Removal of sustainable growth estimate, mean	8.88	10.02	11.3
Median	9.39	9.97	11.33
Correction for 90 day average stock price and dividend yield(SNL), mean	8.68	9.82	11.09
Median	9.16	10.01	11.04
Five distribution utilities using 'corrected data' inputs, mean	8.65	9.33	10.11
Median	8.65	8.88	9.17
Five electric utilities using 'corrected data' inputs, mean	8.02	9.27	10.1
Median	9.05	10.14	10.99

