

Southwestern Public Service Company

Historical Capital Structure

Dollars in Thousands

<u>Line</u>	<u>Description</u>	<u>12/31/2008</u>	<u>12/31/2009</u>	<u>12/31/2010</u>	<u>12/31/2011</u>	<u>6/30/2012</u>	<u>9/30/2012</u>	<u>12/31/2012</u>
1	Long-Term Debt	\$1,014,520	\$ 915,493	\$ 891,797	\$ 984,401	\$1,087,086	\$1,093,812	\$1,094,024
2	Short-Term Debt	-	-	49,000	5,000	-	-	9,000
3	Preferred Stock	-	-	-	-	-	-	-
4	Common Equity	930,306	949,510	962,113	1,076,859	1,089,234	1,131,004	1,176,955
5	Total	<u>\$1,944,826</u>	<u>\$1,865,003</u>	<u>\$1,902,910</u>	<u>\$2,066,260</u>	<u>\$2,176,320</u>	<u>\$2,224,816</u>	<u>\$2,279,979</u>
6	Long-Term Debt	52.17%	49.09%	46.86%	47.64%	49.95%	49.16%	47.98%
7	Short-Term Debt	0.00%	0.00%	2.58%	0.24%	0.00%	0.00%	0.39%
8	Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	Common Equity	<u>47.83%</u>	<u>50.91%</u>	<u>50.56%</u>	<u>52.12%</u>	<u>50.05%</u>	<u>50.84%</u>	<u>51.62%</u>
10	Total	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>	<u>100.00%</u>

Source:

SPS FERC Form-1 and Form-3Q, various dates.

Southwestern Public Service Company

Proxy Group

<u>Line</u>	<u>Company</u>	<u>Credit Ratings¹</u>		<u>Common Equity Ratios</u>		<u>S&P Business Risk Score³</u>
		<u>S&P</u> (1)	<u>Moody's</u> (2)	<u>SNL¹</u> (3)	<u>Value Line²</u> (4)	
1	American Electric Power	BBB	Baa2	44.3%	49.4%	Excellent
2	Cleco Corp.	BBB+	Baa3	52.6%	54.4%	Excellent
3	Empire District Electric	BBB	Baa2	50.1%	50.9%	Excellent
4	Great Plains Energy Inc.	BBB	Baa3	46.9%	54.4%	Excellent
5	Hawaiian Electric	BBB-	Baa2	50.0%	53.1%	Strong
6	IDACORP, Inc.	BBB	Baa2	52.2%	54.5%	Excellent
7	Otter Tail Corp.	BBB	Baa3	54.4%	54.4%	Excellent
8	Pinnacle West Capital	BBB+	Baa2	52.9%	55.4%	Excellent
9	Portland General	BBB	Baa1	51.1%	52.9%	Excellent
10	Southern Co.	A	Baa1	43.8%	47.3%	Excellent
11	Westar Energy	BBB	Baa2	45.4%	48.8%	Excellent
12	Average	BBB	Baa2	49.4%	52.3%	Excellent
13	Southwestern Public Service Company	A-	Baa2	51.63% ⁴		Excellent

Sources:

¹ SNL Financial, Downloaded on August 1, 2013.

² *The Value Line Investment Survey*, May 24, June 21, and August 2, 2013.

³ *S&P RatingsDirect*: "U.S. Regulated Utilities, Strongest To Weakest," July 30, 2013.

⁴ Exhibit MPG-1.

Southwestern Public Service Company

Consensus Analysts' Growth Rates

Line	Company	Zacks		SNL		Reuters		Average of Growth Rates (7)
		Estimated Growth % ¹	Number of Estimates	Estimated Growth % ²	Number of Estimates	Estimated Growth % ³	Number of Estimates	
		(1)	(2)	(3)	(4)	(5)	(6)	
1	American Electric Power	3.87%	N/A	4.00%	5	3.81%	8	3.89%
2	Cleco Corp.	8.00%	N/A	8.00%	1	8.00%	1	8.00%
3	Empire District Electric	3.00%	N/A	3.00%	1	3.00%	1	3.00%
4	Great Plains Energy Inc.	6.19%	N/A	5.00%	5	6.26%	5	5.82%
5	Hawaiian Electric	3.70%	N/A	3.70%	2	3.70%	2	3.70%
6	IDACORP, Inc.	4.00%	N/A	4.00%	1	N/A	N/A	4.00%
7	Otter Tail Corp.	6.00%	N/A	6.00%	1	6.00%	1	6.00%
8	Pinnacle West Capital	4.45%	N/A	4.40%	4	5.45%	4	4.77%
9	Portland General	6.30%	N/A	6.00%	3	6.26%	4	6.19%
10	Southern Co.	4.61%	N/A	4.70%	6	4.80%	6	4.70%
11	Westar Energy	4.31%	N/A	3.30%	4	3.90%	4	3.84%
12	Average	4.95%	N/A	4.74%	3	5.12%	4	4.90%

Sources:

¹ Zacks Elite, <http://www.zackselite.com/>, downloaded on August 1, 2013.

² SNL Interactive, <http://www.snl.com/>, downloaded on August 1, 2013.

³ Reuters, <http://www.reuters.com/>, downloaded on August 1, 2013.

Southwestern Public Service Company

Constant Growth DCF Model (Consensus Analysts' Growth Rates)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price¹ (1)</u>	<u>Analysts' Growth² (2)</u>	<u>Annualized Dividend³ (3)</u>	<u>Adjusted Yield (4)</u>	<u>Constant Growth DCF (5)</u>
1	American Electric Power	\$46.39	3.89%	\$1.96	4.39%	8.28%
2	Cleco Corp.	\$46.78	8.00%	\$1.45	3.35%	11.35%
3	Empire District Electric	\$22.58	3.00%	\$1.00	4.56%	7.56%
4	Great Plains Energy Inc.	\$23.25	5.82%	\$0.87	3.96%	9.78%
5	Hawaiian Electric	\$26.14	3.70%	\$1.24	4.92%	8.62%
6	IDACORP, Inc.	\$49.18	4.00%	\$1.52	3.21%	7.21%
7	Otter Tail Corp.	\$29.12	6.00%	\$1.19	4.34%	10.34%
8	Pinnacle West Capital	\$57.47	4.77%	\$2.18	3.97%	8.74%
9	Portland General	\$31.23	6.19%	\$1.10	3.74%	9.93%
10	Southern Co.	\$44.79	4.70%	\$2.03	4.75%	9.45%
11	Westar Energy	\$32.42	3.84%	\$1.36	4.36%	8.19%
12	Average	\$37.21	4.90%	\$1.45	4.14%	9.04%
13	Median					8.74%

Sources:

¹ SNL Financial, downloaded on August 6, 2013.

² Exhibit MPG-4.

³ *The Value Line Investment Survey*, May 24, June 21, and August 2, 2013.

Southwestern Public Service Company

Payout Ratios

<u>Line</u>	<u>Company</u>	<u>Dividends Per Share</u>		<u>Earnings Per Share</u>		<u>Payout Ratio</u>	
		<u>2012</u>	<u>Projected</u>	<u>2012</u>	<u>Projected</u>	<u>2012</u>	<u>Projected</u>
		(1)	(2)	(3)	(4)	(5)	(6)
1	American Electric Power	\$1.88	\$2.30	\$2.98	\$3.75	63.09%	61.33%
2	Cleco Corp.	\$1.30	\$2.00	\$2.70	\$3.50	48.15%	57.14%
3	Empire District Electric	\$1.00	\$1.20	\$1.32	\$1.70	75.76%	70.59%
4	Great Plains Energy Inc.	\$0.86	\$1.20	\$1.35	\$2.00	63.70%	60.00%
5	Hawaiian Electric	\$1.24	\$1.30	\$1.68	\$1.75	73.81%	74.29%
6	IDACORP, Inc.	\$1.37	\$1.90	\$3.37	\$3.65	40.65%	52.05%
7	Otter Tail Corp.	\$1.19	\$1.30	\$1.05	\$2.00	113.33%	65.00%
8	Pinnacle West Capital	\$2.67	\$2.60	\$3.50	\$4.25	76.29%	61.18%
9	Portland General	\$1.08	\$1.25	\$1.87	\$2.25	57.75%	55.56%
10	Southern Co.	\$1.94	\$2.30	\$2.67	\$3.25	72.66%	70.77%
11	Westar Energy	\$1.32	\$1.52	\$2.15	\$2.75	61.40%	55.27%
12	Average	\$1.44	\$1.72	\$2.24	\$2.80	67.87%	62.11%

Source:

The Value Line Investment Survey, May 24, June 21, and August 2, 2013.

Southwestern Public Service Company

Sustainable Growth Rate

Line	Company	3 to 5 Year Projections										Sustainable Growth Rate (11)
		Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	Book Value Growth (4)	ROE (5)	Adjustment Factor (6)	Adjusted ROE (7)	Payout Ratio (8)	Retention Rate (9)	Internal Growth Rate (10)	
1	American Electric Power	\$2.30	\$3.75	\$38.25	4.05%	9.80%	1.02	10.00%	61.33%	38.67%	3.87%	4.24%
2	Cleco Corp.	\$2.00	\$3.50	\$31.75	5.03%	11.02%	1.02	11.29%	57.14%	42.86%	4.84%	4.88%
3	Empire District Electric	\$1.20	\$1.70	\$19.25	2.64%	8.83%	1.01	8.95%	70.59%	29.41%	2.63%	3.21%
4	Great Plains Energy Inc.	\$1.20	\$2.00	\$25.00	2.82%	8.00%	1.01	8.11%	60.00%	40.00%	3.24%	3.27%
5	Hawaiian Electric	\$1.30	\$1.75	\$20.75	4.97%	8.43%	1.02	8.64%	74.29%	25.71%	2.22%	5.20%
6	IDACORP, Inc.	\$1.90	\$3.65	\$43.45	4.38%	8.40%	1.02	8.58%	52.05%	47.95%	4.11%	4.25%
7	Otter Tail Corp.	\$1.30	\$2.00	\$18.00	4.52%	11.11%	1.02	11.36%	65.00%	35.00%	3.97%	6.05%
8	Pinnacle West Capital	\$2.60	\$4.25	\$43.25	3.62%	9.83%	1.02	10.00%	61.18%	38.82%	3.88%	4.44%
9	Portland General	\$1.25	\$2.25	\$26.75	3.18%	8.41%	1.02	8.54%	55.56%	44.44%	3.80%	5.06%
10	Southern Co.	\$2.30	\$3.25	\$25.75	4.07%	12.62%	1.02	12.87%	70.77%	29.23%	3.76%	4.71%
11	Westar Energy	\$1.52	\$2.75	\$29.65	5.31%	9.27%	1.03	9.51%	55.27%	44.73%	4.26%	4.80%
12	Average	\$1.72	\$2.80	\$29.26	4.05%	9.61%	1.02	9.81%	62.11%	37.89%	3.69%	4.55%

Sources and Notes:

Cols. (1), (2) and (3): *The Value Line Investment Survey*, May 24, June 21, and August 2, 2013.

Col. (4): [Col. (3) / Page 2 Col. (2)] ^ (1/5) - 1.

Col. (5): Col. (2) / Col. (3).

Col. (6): [2 * (1 + Col. (4))] / (2 + Col. (4)).

Col. (7): Col. (6) * Col. (5).

Col. (8): Col. (1) / Col. (2).

Col. (9): 1 - Col. (8).

Col. (10): Col. (9) * Col. (7).

Col. (11): Col. (10) + Page 2 Col. (9).

Southwestern Public Service Company

Sustainable Growth Rate

Line	Company	13-Week Average Stock Price ¹	2012 Book Value Per Share ²	Market to Book Ratio (3)	Common Shares Outstanding (in Millions) ²		Growth (6)	S Factor ³ (7)	V Factor ⁴ (8)	S * V ⁶ (9)
		(1)	(2)	(3)	2012 (4)	3-5 Years (5)	(6)	(7)	(8)	(9)
1	American Electric Power	\$46.39	\$31.37	1.48	485.67	505.00	0.78%	1.16%	32.38%	0.38%
2	Cleco Corp.	\$46.78	\$24.84	1.88	60.36	60.50	0.05%	0.09%	46.90%	0.04%
3	Empire District Electric	\$22.58	\$16.90	1.34	42.48	46.25	1.72%	2.29%	25.16%	0.58%
4	Great Plains Energy Inc.	\$23.25	\$21.75	1.07	153.53	156.00	0.32%	0.34%	6.45%	0.02%
5	Hawaiian Electric	\$26.14	\$16.28	1.61	97.93	124.50	4.92%	7.90%	37.71%	2.98%
6	IDACORP, Inc.	\$49.18	\$35.07	1.40	50.16	51.00	0.33%	0.47%	28.70%	0.13%
7	Otter Tail Corp	\$29.12	\$14.43	2.02	36.17	40.00	2.03%	4.10%	50.45%	2.07%
8	Pinnacle West Capital	\$57.47	\$36.20	1.59	109.74	115.00	0.94%	1.49%	37.01%	0.55%
9	Portland General	\$31.23	\$22.87	1.37	75.56	89.50	3.44%	4.70%	26.78%	1.26%
10	Southern Co.	\$44.79	\$21.09	2.12	867.77	905.00	0.84%	1.79%	52.91%	0.95%
11	Westar Energy	\$32.42	\$22.89	1.42	126.50	135.00	1.31%	1.85%	29.39%	0.54%
12	Average	\$37.21	\$23.97	1.57	191.44	202.52	1.52%	2.38%	33.99%	0.86%

Sources and Notes:

¹ SNL Financial, downloaded on August 6, 2013.

² *The Value Line Investment Survey*, May 24, June 21, and August 2, 2013.

³ Expected Growth in the Number of Shares, Column (3) * Column (6).

⁴ Expected Profit of Stock Investment, [1 - 1 / Column (3)].

Southwestern Public Service Company

Constant Growth DCF Model (Sustainable Growth Rate)

<u>Line</u>	<u>Company</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Sustainable Growth²</u> (2)	<u>Annualized Dividend³</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	American Electric Power	\$46.39	4.24%	\$1.96	4.40%	8.65%
2	Cleco Corp.	\$46.78	4.88%	\$1.45	3.25%	8.13%
3	Empire District Electric	\$22.58	3.21%	\$1.00	4.57%	7.78%
4	Great Plains Energy Inc.	\$23.25	3.27%	\$0.87	3.86%	7.13%
5	Hawaiian Electric	\$26.14	5.20%	\$1.24	4.99%	10.19%
6	IDACORP, Inc.	\$49.18	4.25%	\$1.52	3.22%	7.47%
7	Otter Tail Corp.	\$29.12	6.05%	\$1.19	4.34%	10.39%
8	Pinnacle West Capital	\$57.47	4.44%	\$2.18	3.96%	8.40%
9	Portland General	\$31.23	5.06%	\$1.10	3.70%	8.76%
10	Southern Co.	\$44.79	4.71%	\$2.03	4.75%	9.46%
11	Westar Energy	\$32.42	4.80%	\$1.36	4.40%	9.20%
12	Average	\$37.21	4.55%	\$1.45	4.13%	8.69%
13	Median					8.65%

Sources:

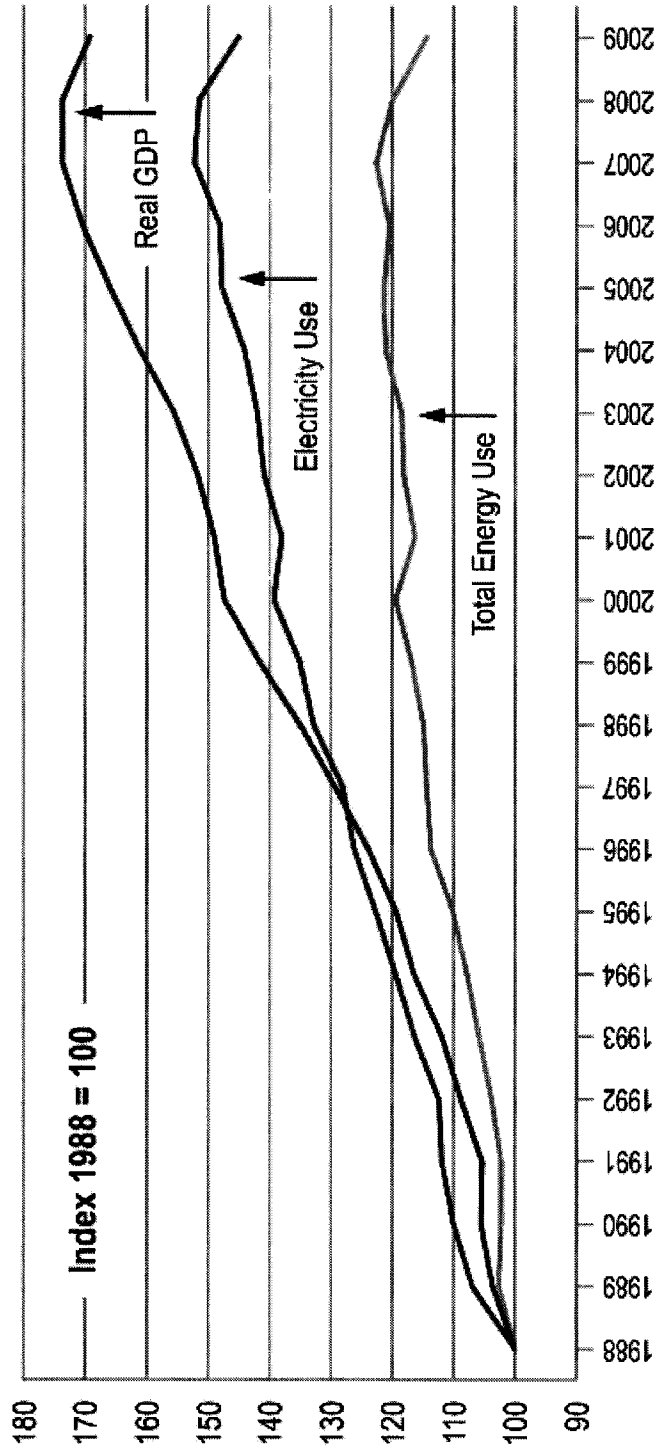
¹ SNL Financial, downloaded on August 6, 2013.

² Exhibit MPG-7, page 1 of 2.

³ *The Value Line Investment Survey*, May 24, June 21, and August 2, 2013.

Southwestern Public Service Company

Electricity Sales Are Linked to U.S. Economic Growth



Note:
1988 represents the base year. Graph depicts increases or decreases from the base year.

Sources:
U.S. Department of Energy, Energy Information Administration.
Edison Electric Institute, <http://www.eei.org>.

Southwestern Public Service Company

Multi-Stage Growth DCF Model

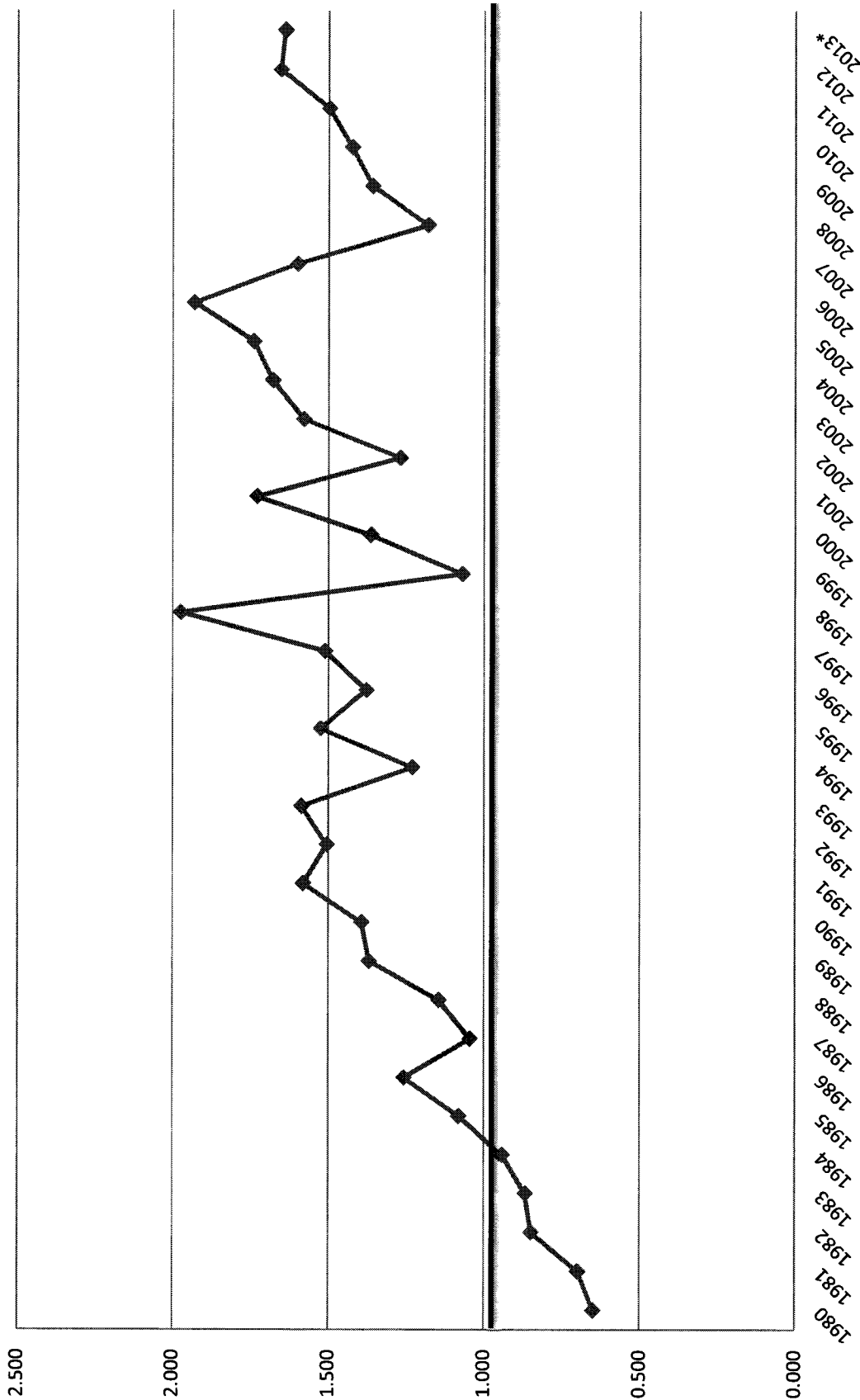
Line	Company	13-Week AVG Stock Price ¹ (1)	Annualized Dividend ² (2)	First Stage Growth ³ (3)	Second Stage Growth				Third Stage Growth ⁴ (9)	Multi-Stage Growth DCF (10)
					Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	
1	American Electric Power	\$46.39	\$1.96	3.89%	4.06%	4.23%	4.40%	4.56%	4.73%	9.06%
2	Cleco Corp.	\$46.78	\$1.45	8.00%	7.48%	6.97%	6.45%	5.93%	5.42%	8.85%
3	Empire District Electric	\$22.58	\$1.00	3.00%	3.32%	3.63%	3.95%	4.27%	4.58%	9.02%
4	Great Plains Energy Inc.	\$23.25	\$0.87	5.82%	5.66%	5.51%	5.36%	5.21%	5.05%	9.06%
5	Hawaiian Electric	\$26.14	\$1.24	3.70%	3.90%	4.10%	4.30%	4.50%	4.70%	9.52%
6	IDACORP, Inc.	\$49.18	\$1.52	4.00%	4.15%	4.30%	4.45%	4.60%	4.75%	7.95%
7	Otter Tail Corp.	\$29.12	\$1.19	6.00%	5.82%	5.63%	5.45%	5.27%	5.08%	9.50%
8	Pinnacle West Capital	\$57.47	\$2.18	4.77%	4.79%	4.81%	4.83%	4.86%	4.88%	8.84%
9	Portland General	\$31.23	\$1.10	6.19%	5.97%	5.76%	5.54%	5.33%	5.11%	8.90%
10	Southern Co	\$44.79	\$2.03	4.70%	4.74%	4.77%	4.80%	4.83%	4.87%	9.60%
11	Westar Energy	\$32.42	\$1.36	3.84%	4.01%	4.19%	4.37%	4.55%	4.72%	9.01%
12	Average	\$37.21	\$1.45	4.90%	4.90%	4.90%	4.90%	4.90%	4.90%	9.03%
13	Median									9.02%

Sources:

- ¹ SNL Financial, downloaded on August 6, 2013.
- ² The Value Line Investment Survey, May 24, June 21, and August 2, 2013.
- ³ Exhibit MPG-4.
- ⁴ Blue Chip Economic Indicators, June 1, 2013 at 14.

Southwestern Public Service Company

Common Stock Market/Book Ratio



* Jan - Jun 2013

Southwestern Public Service Company

Equity Risk Premium - Treasury Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns¹</u> (1)	<u>Treasury Bond Yield²</u> (2)	<u>Indicated Risk Premium</u> (3)
1	1986	13.93%	7.80%	6.13%
2	1987	12.99%	8.58%	4.41%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.60%	4.81%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.70%	4.69%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.99%	5.37%
22	2007	10.36%	4.83%	5.53%
23	2008	10.46%	4.28%	6.18%
24	2009	10.48%	4.07%	6.41%
25	2010	10.34%	4.25%	6.09%
26	2011	10.22%	3.91%	6.31%
27	2012	10.01%	2.92%	7.09%
28	2013 ³	9.80%	3.14%	6.66%
29	Average	11.34%	5.99%	5.35%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and July 9, 2013, excluding the VA cases, which are subject to a 200 basis point adjustment for certain generation assets.

² St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

³ The data includes the period Jan - June 2013.

Southwestern Public Service Company

Equity Risk Premium - Utility Bond

<u>Line</u>	<u>Year</u>	<u>Authorized Electric Returns¹ (1)</u>	<u>Average "A" Rated Utility Bond Yield² (2)</u>	<u>Indicated Risk Premium (3)</u>
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008	10.46%	6.53%	3.93%
24	2009	10.48%	6.04%	4.44%
25	2010	10.34%	5.46%	4.88%
26	2011	10.22%	5.04%	5.18%
27	2012	10.01%	4.13%	5.88%
28	2013 ³	9.80%	4.20%	5.60%
29	Average	11.34%	7.39%	3.95%

Sources:

¹ Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06, and July 9, 2013, excluding the VA cases, which are subject to a 200 basis point adjustment for certain generation assets.

² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2011 were obtained from <http://credittrends.moodys.com/>.

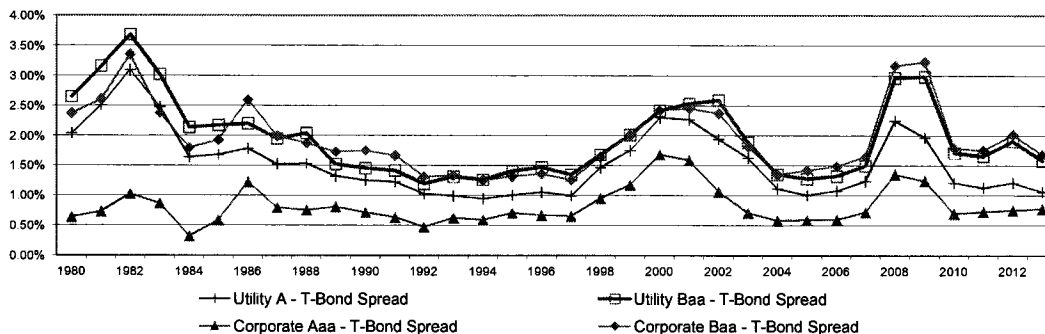
³ The data includes the period Jan - June 2013.

Southwestern Public Service Company

Bond Yield Spreads

Line	Year	T-Bond Yield ¹ (1)	Public Utility Bond				Corporate Bond				Utility to Corporate	
			A ² (2)	Baa ² (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa ¹ (6)	Baa ¹ (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	Baa Spread (10)	A - Aaa Spread (11)
1	1980	11.30%	13.34%	13.95%	2.04%	2.65%	11.94%	13.67%	0.64%	2.37%	0.28%	1.40%
2	1981	13.44%	15.95%	16.60%	2.51%	3.16%	14.17%	16.04%	0.73%	2.60%	0.56%	1.78%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%	2.07%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.38%	0.65%	1.62%
5	1984	12.39%	14.03%	14.53%	1.64%	2.14%	12.71%	14.19%	0.32%	1.80%	0.34%	1.32%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%	1.10%
7	1986	7.80%	9.58%	10.00%	1.78%	2.20%	9.02%	10.39%	1.22%	2.59%	-0.39%	0.56%
8	1987	8.58%	10.10%	10.53%	1.52%	1.95%	9.38%	10.58%	0.80%	2.00%	-0.05%	0.72%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%	0.78%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%	0.51%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.29%	0.54%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.67%	-0.25%	0.59%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%	0.55%
14	1993	6.60%	7.59%	7.91%	0.99%	1.31%	7.22%	7.93%	0.62%	1.33%	-0.02%	0.37%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%	0.35%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%	0.30%
17	1996	6.70%	7.75%	8.17%	1.05%	1.47%	7.37%	8.05%	0.67%	1.35%	0.12%	0.38%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.66%	1.26%	0.09%	0.34%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%	0.51%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.18%	2.01%	0.01%	0.58%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	-0.01%	0.62%
22	2001	5.49%	7.76%	8.03%	2.27%	2.54%	7.08%	7.95%	1.59%	2.45%	0.08%	0.68%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%	0.88%
24	2003	4.96%	6.58%	6.84%	1.62%	1.89%	5.67%	6.77%	0.71%	1.81%	0.08%	0.91%
25	2004	5.05%	6.16%	6.40%	1.11%	1.35%	5.63%	6.39%	0.58%	1.35%	0.00%	0.53%
26	2005	4.65%	5.65%	5.93%	1.00%	1.28%	5.24%	6.06%	0.59%	1.42%	-0.14%	0.41%
27	2006	4.99%	6.07%	6.32%	1.08%	1.32%	5.59%	6.48%	0.60%	1.49%	-0.16%	0.48%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.72%	1.65%	-0.15%	0.52%
29	2008	4.28%	6.53%	7.25%	2.25%	2.97%	5.63%	7.45%	1.35%	3.17%	-0.20%	0.90%
30	2009	4.07%	6.04%	7.06%	1.97%	2.99%	5.31%	7.30%	1.24%	3.23%	-0.24%	0.72%
31	2010	4.25%	5.46%	5.96%	1.21%	1.71%	4.94%	6.04%	0.69%	1.79%	-0.08%	0.52%
32	2011	3.91%	5.04%	5.56%	1.13%	1.65%	4.64%	5.66%	0.73%	1.75%	-0.10%	0.40%
33	2012	2.92%	4.13%	4.83%	1.21%	1.91%	3.67%	4.94%	0.75%	2.01%	-0.11%	0.46%
34	2013 ³	3.14%	4.20%	4.72%	1.06%	1.58%	3.92%	4.82%	0.78%	1.68%	-0.10%	0.28%
35	Average	7.05%	8.60%	9.01%	1.55%	1.96%	7.87%	8.99%	0.82%	1.94%	0.02%	0.73%

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility



Sources:

- ¹ St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>
² Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2009 were obtained from the Mergent Bond Record. The utility yields from 2010-2011 were obtained from <http://credittrends.moodys.com/>.
³ The data includes the period Jan - June 2013.

Southwestern Public Service Company

Treasury and Utility Bond Yields

<u>Line</u>	<u>Date</u>	<u>Treasury Bond Yield¹</u> (1)	<u>"A" Rated Utility Bond Yield²</u> (2)	<u>"Baa" Rated Utility Bond Yield²</u> (3)
1	08/02/13	3.69%	4.63%	5.18%
2	07/26/13	3.61%	4.62%	5.13%
3	07/19/13	3.56%	4.62%	5.12%
4	07/12/13	3.64%	4.76%	5.28%
5	07/05/13	3.68%	4.82%	5.38%
6	06/28/13	3.52%	4.67%	5.23%
7	06/21/13	3.56%	4.72%	5.28%
8	06/14/13	3.28%	4.42%	4.98%
9	06/07/13	3.33%	4.43%	4.96%
10	05/31/13	3.30%	4.36%	4.86%
11	05/24/13	3.18%	4.22%	4.69%
12	05/17/13	3.17%	4.21%	4.69%
13	05/10/13	3.10%	4.16%	4.64%
14	Average	3.43%	4.51%	5.03%
15	Spread To Treasury		1.08%	1.60%

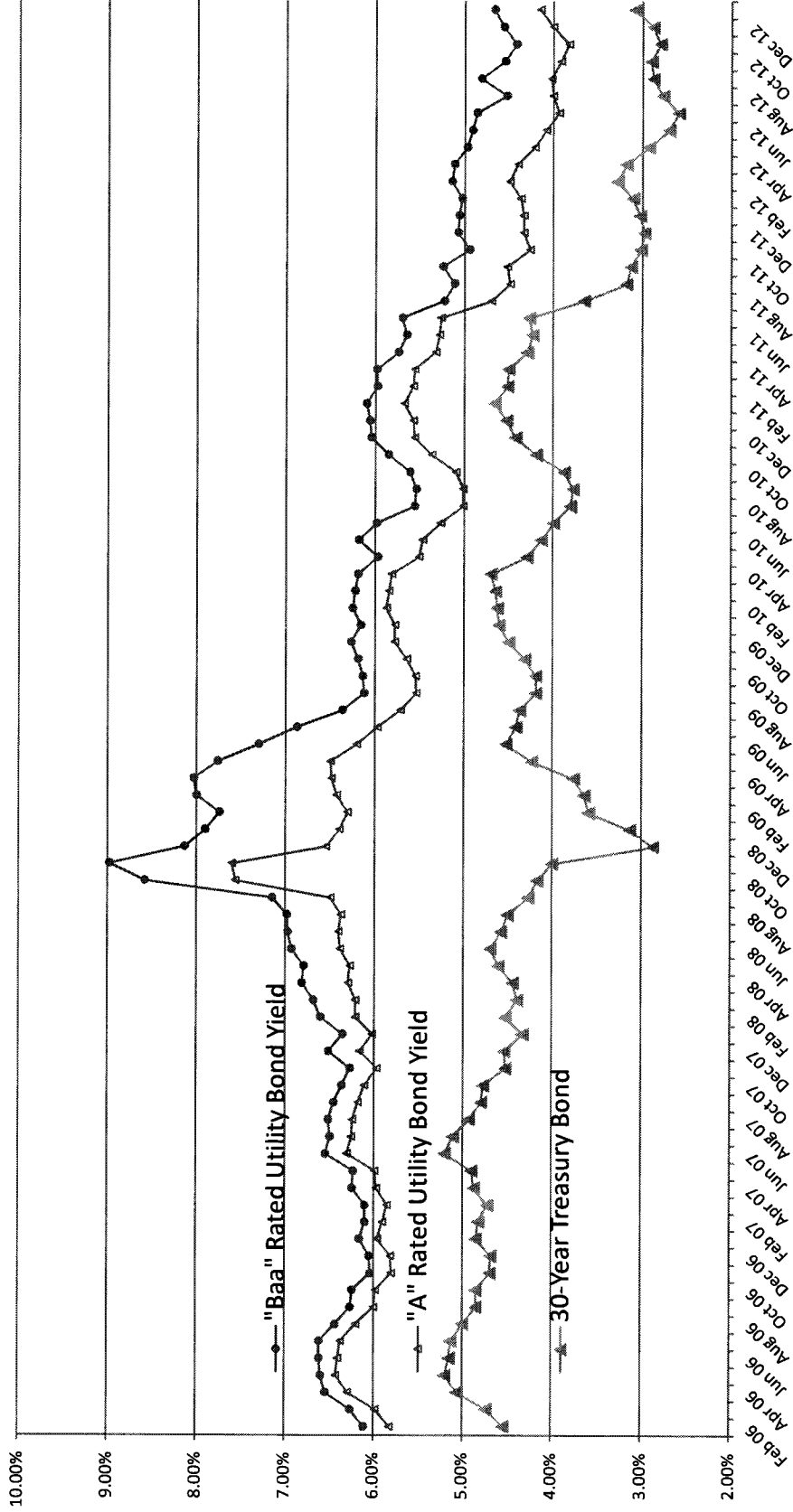
Sources:

¹ St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org>.

²<http://credittrends.moody's.com/>.

Southwestern Public Service Company

Trends in Bond Yields

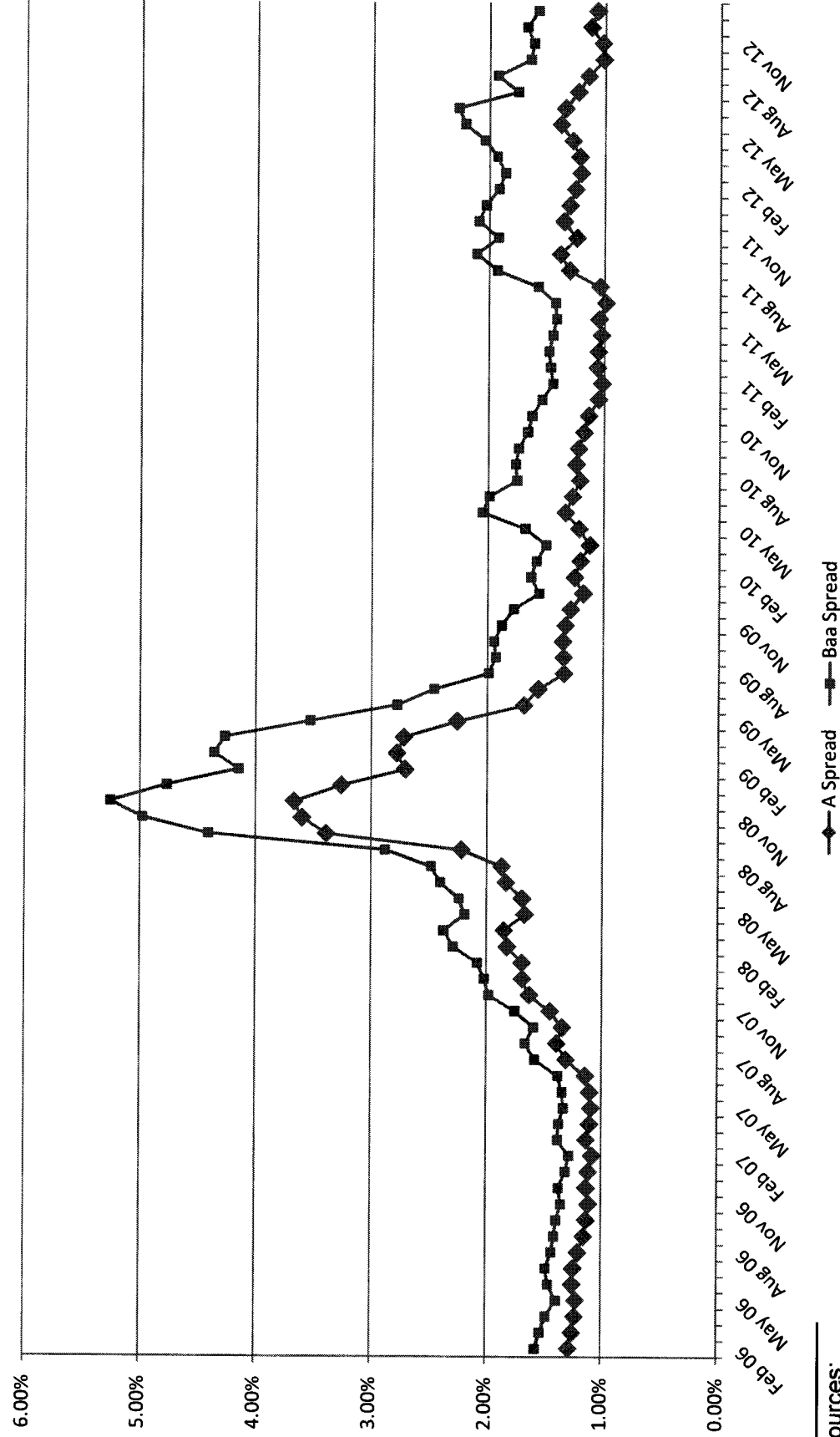


Sources:

Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.
St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>

Southwestern Public Service Company

Yield Spread Between Utility Bonds and 30-Year Treasury Bonds



Sources:

Merchant Bond Record.
www.moodys.com, Bond Yields and Key Indicators.

St. Louis Federal Reserve: Economic Research, <http://research.stlouisfed.org/>

Southwestern Public Service Company

Value Line Beta

<u>Line</u>	<u>Company</u>	<u>Beta</u>
1	American Electric Power	0.65
2	Cleco Corp.	0.65
3	Empire District Electric	0.65
4	Great Plains Energy Inc.	0.80
5	Hawaiian Electric	0.70
6	IDACORP, Inc.	0.70
7	Otter Tail Corp.	0.90
8	Pinnacle West Capital	0.70
9	Portland General	0.75
10	Southern Co.	0.55
11	Westar Energy	0.75
12	Average	0.71

Source:
The Value Line Investment Survey,
May 24, June 21, and August 2, 2013.

Southwestern Public Service Company

CAPM Return

<u>Line</u>	<u>Description</u>	<u>Market Risk Premium</u>
1	Risk-Free Rate ¹	4.10%
2	Risk Premium ²	6.70%
3	Beta ³	0.71
4	CAPM	8.85%

Sources:

¹ *Blue Chip Financial Forecasts*; August 1, 2013, at 2.

² Morningstar, Inc. *Ibbotson SBBI 2013 Classic Yearbook* at 88,
and Morningstar, Inc. *Ibbotson SBBI 2013 Valuation Yearbook*
at 54 and 66.

³ Exhibit MPG-16.

Southwestern Public Service Company

Standard & Poor's Credit Metrics

<u>Line</u>	<u>Description</u>	Retail	S&P Benchmark ^{1/2}		<u>Reference</u> (4)
		<u>Cost of Service</u> <u>Amount</u> (1)	<u>Significant</u> (2)	<u>Aggressive</u> (3)	
1	Rate Base (NM)	\$ 479,777,260			MFR Schedule A-1.
2	Weighted Common Return	4.83%			Page 2, Line 2, Col. 4.
3	Pre-Tax Rate of Return	11.07%			Page 2, Line 3, Col. 5.
4	Income to Common	\$ 23,161,247			Line 1 x Line 2.
5	EBIT	\$ 53,113,889			Line 1 x Line 3.
6	Depreciation & Amortization	\$ 27,343,859			MFR Schedule A-1.
7	Imputed Amortization	\$ 15,800			Response to FEA 2-03.
8	Deferred Income Taxes & ITC	\$ 4,591,504			MFR Schedule A-1.
9	Funds from Operations (FFO)	\$ 55,112,410			Sum of Line 4 and Lines 6 through 8.
10	Imputed Interest Expense	\$ 34,300			Response to FEA 2-03.
11	EBITDA	\$ 80,507,848			Sum of Lines 5 through 7 and Line 10.
12	Total Debt Ratio	53%	45% - 50%	50% - 60%	Page 3, Line 3, Col. 2.
13	Debt to EBITDA	3.2x	3.0x - 4.0x	4.0x - 5.0x	(Line 1 x Line 12) / Line 11.
14	FFO to Total Debt	22%	20% - 30%	12% - 20%	Line 9 / (Line 1 x Line 12).

Sources:

¹ Standard & Poor's: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded," May 27, 2009.

² S&P RatingsDirect: "U.S. Regulated Utilities, Strongest to Weakest," July 30, 2013.

Note:

Based on the October 2012 S&P report, SPS has an "Excellent" business profile and a "Significant" financial profile.

Southwestern Public Service Company

Standard & Poor's Credit Metrics (Pre-Tax Rate of Return)

<u>Line</u>	<u>Description</u>	<u>Amount</u> (1)	<u>Weight</u> (2)	<u>Cost</u> (3)	<u>Weighted</u> <u>Cost</u> (4)	<u>Pre-Tax</u> <u>Weighted</u> <u>Cost</u> (5)
1	Long-Term Debt	\$ 1,242,867,022	48.37%	6.27%	3.03%	3.03%
2	Common Equity	<u>1,326,686,686</u>	<u>51.63%</u>	9.35%	<u>4.83%</u>	<u>8.04%</u>
3	Total	\$ 2,569,553,708	100.00%		7.86%	11.07%
4	Tax Conversion Factor*					1.6650

Sources:

Exhibit MPG-1.

* Attachment TLW-2.

Southwestern Public Service Company

Standard & Poor's Credit Metrics (Financial Capital Structure)

<u>Line</u>	<u>Description</u>	<u>Amount</u> (1)	<u>Weight</u> (2)
1	Long-Term Debt	\$ 1,242,867,022	44.06%
2	Off Balance Sheet Debt*	<u>251,600,000</u>	<u>8.92%</u>
3	Total Debt	\$ 1,494,467,022	52.97%
4	Common Equity	<u>1,326,686,686</u>	<u>47.03%</u>
5	Total	\$ 2,821,153,708	100.00%

Sources:

Exhibit MPG-1.

* Response to Question No. FEA 2-03.

Southwestern Public Service Company

Reed Revised Constant Growth DCF Analysis (30-Day Average Stock Price)

Line	Company	Stock Price (1)	Annualized Dividend (2)	Low EPS Growth Rate (3)	Expected Dividend Yield (4)	Low DCF ROE (5)	Average EPS Growth Rate (6)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (10)	High DCF ROE (11)
1	American Electric Power	\$43.59	\$1.88	3.00%	4.44%	7.44%	3.28%	4.45%	7.73%	3.48%	4.46%	7.94%
2	Cleco Corp.	\$41.51	\$1.35	3.00%	3.35%	6.35%	4.17%	3.39%	7.55%	6.50%	3.46%	9.96%
3	Empire District Electric	\$21.26	\$1.00	6.00%	4.99%	10.99%	8.10%	5.09%	13.19%	10.20%	5.18%	15.38%
4	Great Plains Energy Inc.	\$21.92	\$0.85	5.50%	4.09%	9.59%	8.01%	4.19%	12.19%	10.35%	4.28%	14.63%
5	Hawaiian Electric	\$25.75	\$1.24	7.05%	5.15%	12.20%	8.05%	5.20%	13.25%	9.00%	5.25%	14.25%
6	IDACORP, Inc.	\$43.62	\$1.52	4.00%	3.62%	7.62%	4.00%	3.62%	7.62%	4.00%	3.62%	7.62%
7	Otter Tail Corp.	\$23.88	\$1.19	5.00%	5.23%	10.23%	5.00%	5.23%	10.23%	5.00%	5.23%	10.23%
8	Pinnacle West Capital	\$52.10	\$2.18	5.00%	4.39%	9.39%	5.37%	4.41%	9.78%	6.03%	4.44%	10.47%
9	Portland General	\$27.00	\$1.08	2.67%	4.11%	6.78%	4.08%	4.16%	8.25%	5.50%	4.22%	9.72%
10	Southern Co.	\$45.14	\$1.96	5.00%	4.56%	9.56%	5.13%	4.56%	9.70%	5.22%	4.57%	9.79%
11	Westar Energy	\$29.27	\$1.32	5.67%	4.77%	10.44%	7.39%	4.84%	12.23%	10.00%	4.96%	14.96%
12	Average	\$33.40	\$1.37	4.72%	4.43%	9.14%	5.69%	4.47%	10.16%	6.84%	4.52%	11.36%
13	Median			5.00%	4.44%	9.56%	5.13%	4.45%	9.78%	6.03%	4.46%	10.23%

Source:
Attachment JJR-3, Page 1.

Southwestern Public Service Company

Reed Revised Constant Growth DCF Analysis (90-Day Stock Price)

Line	Company	Stock Price	Annualized Dividend	Low EPS Growth Rate (1)	Expected Dividend Yield (3)	Low DCF ROE (4)	Average EPS Growth Rate (5)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (11)	High DCF ROE (12)
1	American Electric Power	\$43.14	\$1.88	3.00%	4.49%	7.49%	3.28%	4.50%	7.78%	3.48%	4.51%	7.99%
2	Cleco Corp.	\$42.05	\$1.35	3.00%	3.31%	6.31%	4.17%	3.34%	7.51%	6.50%	3.42%	9.92%
3	Empire District Electric	\$21.40	\$1.00	6.00%	4.95%	10.95%	8.10%	5.05%	13.15%	10.20%	5.15%	15.35%
4	Great Plains Energy Inc.	\$21.98	\$0.85	5.50%	4.08%	9.58%	8.01%	4.18%	12.18%	10.35%	4.27%	14.62%
5	Hawaiian Electric	\$26.97	\$1.24	7.05%	4.92%	11.97%	8.05%	4.97%	13.02%	9.00%	5.01%	14.01%
6	IDACORP, Inc.	\$42.91	\$1.52	4.00%	3.68%	7.68%	4.00%	3.68%	7.68%	4.00%	3.68%	7.68%
7	Otter Tail Corp.	\$23.56	\$1.19	5.00%	5.30%	10.30%	5.00%	5.30%	10.30%	5.00%	5.30%	10.30%
8	Pinnacle West Capital	\$52.59	\$2.18	5.00%	4.35%	9.35%	5.37%	4.37%	9.73%	6.03%	4.40%	10.43%
9	Portland General	\$27.16	\$1.08	2.67%	4.08%	6.75%	4.08%	4.14%	8.22%	5.50%	4.19%	9.69%
10	Southern Co.	\$45.99	\$1.96	5.00%	4.47%	9.47%	5.13%	4.48%	9.61%	5.22%	4.48%	9.70%
11	Westar Energy	\$29.66	\$1.32	5.67%	4.70%	10.37%	7.39%	4.78%	12.17%	10.00%	4.90%	14.90%
12	Average	\$33.53	\$1.37	4.72%	4.40%	9.11%	5.69%	4.44%	10.12%	6.84%	4.48%	11.33%
13	Median			5.00%	4.47%	9.47%	5.13%	4.48%	9.73%	6.03%	4.48%	10.30%

Source:
Attachment JJR-3, Page 2.

Southwestern Public Service Company

Reed Revised Constant Growth DCF Analysis (180-Day Stock Price)

Line	Company	Stock Price	Annualized Dividend	Low EPS			Average EPS			High EPS		
				Growth Rate (1)	Expected Dividend Yield (3)	Low DCF ROE (4)	Growth Rate (5)	Expected Dividend Yield (7)	Average DCF ROE (8)	Growth Rate (9)	Expected Dividend Yield (11)	High DCF ROE (12)
1	American Electric Power	\$40.92	\$1.88	3.00%	4.73%	7.73%	3.28%	4.74%	8.02%	3.48%	4.75%	8.23%
2	Cleco Corp.	\$41.15	\$1.35	3.00%	3.38%	6.38%	4.17%	3.42%	7.58%	6.50%	3.49%	9.99%
3	Empire District Electric	\$20.90	\$1.00	6.00%	5.07%	11.07%	8.10%	5.17%	13.27%	10.20%	5.27%	15.47%
4	Great Plains Energy Inc.	\$21.12	\$0.85	5.50%	4.25%	9.75%	8.01%	4.35%	12.35%	10.35%	4.44%	14.79%
5	Hawaiian Electric	\$26.78	\$1.24	7.05%	4.96%	12.01%	8.05%	5.00%	13.05%	9.00%	5.05%	14.05%
6	IDACORP, Inc.	\$41.61	\$1.52	4.00%	3.80%	7.80%	4.00%	3.80%	7.80%	4.00%	3.80%	7.80%
7	Offit Tail Corp.	\$22.69	\$1.19	5.00%	5.51%	10.51%	5.00%	5.51%	10.51%	5.00%	5.51%	10.51%
8	Pinnacle West Capital	\$50.67	\$2.18	5.00%	4.52%	9.52%	5.37%	4.53%	9.90%	6.03%	4.56%	10.59%
9	Portland General	\$26.27	\$1.08	2.67%	4.22%	6.89%	4.08%	4.28%	8.36%	5.50%	4.34%	9.84%
10	Southern Co.	\$45.83	\$1.96	5.00%	4.49%	9.49%	5.13%	4.50%	9.63%	5.22%	4.50%	9.72%
11	Westar Energy	\$29.05	\$1.32	5.67%	4.80%	10.47%	7.39%	4.88%	12.27%	10.00%	5.00%	15.00%
12	Average	\$32.46	\$1.37	4.72%	4.52%	9.24%	5.69%	4.56%	10.25%	6.84%	4.61%	11.45%
13	Median			5.00%	4.52%	9.52%	5.13%	4.53%	9.90%	6.03%	4.56%	10.51%

Source:
Attachment JJR-3, Page 3.

Southwestern Public Service Company

Reed Revised Constant Growth DCF Analysis (360-Day Stock Price)

Line	Company	Stock Price	Annualized Dividend	Low EPS Growth Rate (1)	Expected Dividend Yield (3)	Low DCF ROE (4)	Average EPS Growth Rate (5)	Expected Dividend Yield (7)	Average DCF ROE (8)	High EPS Growth Rate (9)	Expected Dividend Yield (11)	High DCF ROE (12)
1	American Electric Power	\$39.76	\$1.88	3.00%	4.87%	7.87%	3.28%	4.88%	8.16%	3.48%	4.89%	8.37%
2	Cleco Corp.	\$38.51	\$1.35	3.00%	3.61%	6.61%	4.17%	3.65%	7.82%	6.50%	3.73%	10.23%
3	Empire District Electric	\$20.47	\$1.00	6.00%	5.18%	11.18%	8.10%	5.28%	13.38%	10.20%	5.38%	15.58%
4	Great Plains Energy Inc.	\$20.73	\$0.85	5.50%	4.33%	9.83%	8.01%	4.43%	12.44%	10.35%	4.53%	14.88%
5	Hawaiian Electric	\$25.79	\$1.24	7.05%	5.15%	12.20%	8.05%	5.20%	13.25%	9.00%	5.24%	14.24%
6	IDACORP, Inc.	\$40.66	\$1.52	4.00%	3.89%	7.89%	4.00%	3.89%	7.89%	4.00%	3.89%	7.89%
7	Otter Tail Corp.	\$21.75	\$1.19	5.00%	5.75%	10.75%	5.00%	5.75%	10.75%	5.00%	5.75%	10.75%
8	Pinnacle West Capital	\$47.88	\$2.18	5.00%	4.78%	9.78%	5.37%	4.80%	10.16%	6.03%	4.83%	10.86%
9	Portland General	\$25.39	\$1.08	2.67%	4.37%	7.04%	4.08%	4.43%	8.51%	5.50%	4.49%	9.99%
10	Southern Co.	\$44.22	\$1.96	5.00%	4.65%	9.65%	5.13%	4.66%	9.79%	5.22%	4.66%	9.88%
11	Westar Energy	\$28.00	\$1.32	5.67%	4.98%	10.65%	7.39%	5.06%	12.45%	10.00%	5.19%	15.19%
12	Average	\$31.22	\$1.37	4.72%	4.69%	9.40%	5.69%	4.73%	10.42%	6.84%	4.78%	11.62%
13	Median			5.00%	4.78%	9.78%	5.13%	4.80%	10.16%	6.03%	4.83%	10.75%

Source:
Attachment JJR-3, Page 4.

Southwestern Public Service Company

Revised Reed Multi-Stage Growth DCF Model (Summary)

<u>Line</u>	<u>Description</u>	<u>Reed¹</u> (1)	<u>Corrected</u> <u>DCF Results²</u> (2)
	<u>Multi-Stage DCF Models</u>		
1	30-Day Average Stock Price	10.17%	9.42%
2	90-Day Average Stock Price	10.13%	9.38%
3	180-Day Average Stock Price	10.26%	9.51%
4	360-Day Average Stock Price	<u>10.42%</u>	<u>9.67%</u>
5	Average	10.25%	9.50%

Sources:

¹ Reed Direct at 54.

² Pages 2 to 5.

Southwestern Public Service Company

Revised Reed Multi-Stage Growth DCF Model (30-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Analyst Growth</u> (2)	<u>Long-Term Growth*</u> (3)	<u>Payout Ratio</u>		<u>Multi-Stage Growth DCF</u> (7)
					<u>2013</u> (4)	<u>2016</u> (5)	<u>2022</u> (6)
1	American Electric Power	\$43.59	3.28%	4.90%	64.00%	62.00%	62.00%
2	Cleco Corp.	\$41.51	4.17%	4.90%	54.00%	56.00%	56.00%
3	Empire District Electric	\$21.26	8.10%	4.90%	72.00%	70.00%	70.00%
4	Great Plains Energy Inc.	\$21.92	8.01%	4.90%	63.00%	61.00%	61.00%
5	Hawaiian Electric	\$25.75	8.05%	4.90%	73.00%	67.00%	67.00%
6	IDACORP, Inc.	\$43.62	4.00%	4.90%	48.00%	56.00%	56.00%
7	Otter Tail Corp.	\$23.88	5.00%	4.90%	99.00%	70.00%	70.00%
8	Pinnacle West Capital	\$52.10	5.37%	4.90%	62.00%	64.00%	64.00%
9	Portland General	\$27.00	4.08%	4.90%	57.00%	54.00%	54.00%
10	Southern Co.	\$45.14	5.13%	4.90%	72.00%	69.00%	69.00%
11	Westar Energy	\$29.27	7.39%	4.90%	66.00%	60.00%	60.00%
12	Average	\$34.09	5.69%	4.90%	66.36%	62.64%	62.64%
13	Median						

Sources:

Attachment JJR-6, Page 1 of 13.

* Blue Chip Financial Forecasts, June 1, 2013 at 14.

Southwestern Public Service Company

Revised Reed Multi-Stage Growth DCF Model (90-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> (1)	<u>Analyst Growth</u> (2)	<u>Long-Term Growth*</u> (3)	<u>Payout Ratio</u>		<u>Multi-Stage Growth DCF</u> (7)
					<u>2013</u> (4)	<u>2016</u> (5)	<u>2022</u> (6)
1	American Electric Power	\$43.14	3.28%	4.90%	64.00%	62.00%	62.00%
2	Cleco Corp.	\$42.05	4.17%	4.90%	54.00%	56.00%	56.00%
3	Empire District Electric	\$21.40	8.10%	4.90%	72.00%	70.00%	70.00%
4	Great Plains Energy Inc.	\$21.98	8.01%	4.90%	63.00%	61.00%	61.00%
5	Hawaiian Electric	\$26.97	8.05%	4.90%	73.00%	67.00%	67.00%
6	IDACORP, Inc.	\$42.91	4.00%	4.90%	48.00%	56.00%	56.00%
7	Otter Tail Corp.	\$23.56	5.00%	4.90%	99.00%	70.00%	70.00%
8	Pinnacle West Capital	\$52.59	5.37%	4.90%	62.00%	64.00%	64.00%
9	Portland General	\$27.16	4.08%	4.90%	57.00%	54.00%	54.00%
10	Southern Co.	\$45.99	5.13%	4.90%	72.00%	69.00%	69.00%
11	Westar Energy	\$29.66	7.39%	4.90%	66.00%	60.00%	60.00%
12	Average	\$34.31	5.69%	4.90%	66.36%	62.64%	62.64%
13	Median						

Sources:

Attachment JJR-6, Page 4 of 13.

* Blue Chip Financial Forecasts, June 1, 2013 at 14.

Southwestern Public Service Company

Revised Reed Multi-Stage Growth DCF Model (180-Day Average Stock Price)

<u>Line</u>	<u>Company</u>	<u>Stock Price</u> <u>(1)</u>	<u>Analyst Growth</u> <u>(2)</u>	<u>Long-Term Growth*</u> <u>(3)</u>	<u>2013</u> <u>(4)</u>	<u>Payout Ratio</u> <u>2016</u> <u>(5)</u>	<u>2022</u> <u>(6)</u>	<u>Multi-Stage Growth DCF</u> <u>(7)</u>
1	American Electric Power	\$40.92	3.28%	4.90%	64.00%	62.00%	62.00%	9.62%
2	Cleco Corp.	\$41.15	4.17%	4.90%	54.00%	56.00%	56.00%	8.55%
3	Empire District Electric	\$20.90	8.10%	4.90%	72.00%	70.00%	70.00%	10.81%
4	Great Plains Energy Inc.	\$21.12	8.01%	4.90%	63.00%	61.00%	61.00%	9.71%
5	Hawaiian Electric	\$26.78	8.05%	4.90%	73.00%	67.00%	67.00%	9.76%
6	IDACORP, Inc.	\$41.61	4.00%	4.90%	48.00%	56.00%	56.00%	9.49%
7	Otter Tail Corp.	\$22.69	5.00%	4.90%	99.00%	70.00%	70.00%	NA
8	Pinnacle West Capital	\$50.67	5.37%	4.90%	62.00%	64.00%	64.00%	9.14%
9	Portland General	\$26.27	4.08%	4.90%	57.00%	54.00%	54.00%	9.10%
10	Southern Co.	\$45.83	5.13%	4.90%	72.00%	69.00%	69.00%	9.20%
11	Westar Energy	\$29.05	7.39%	4.90%	66.00%	60.00%	60.00%	9.69%
12	Average	\$33.36	5.69%	4.90%	66.36%	62.64%	62.64%	9.51%
13	Median							9.55%

Sources:

Attachment JJR-6, Page 7 of 13.

* Blue Chip Financial Forecasts, June 1, 2013 at 14.

Southwestern Public Service Company

Revised Reed Multi-Stage Growth DCF Model (360-Day Average Stock Price)

Line	Company	Stock Price (1)	Analyst Growth (2)	Long-Term Growth* (3)	Payout Ratio			Multi-Stage Growth DCF (7)
					2013 (4)	2016 (5)	2022 (6)	
1	American Electric Power	\$39.76	3.28%	4.90%	64.00%	62.00%	62.00%	9.77%
2	Cleco Corp.	\$38.51	4.17%	4.90%	54.00%	56.00%	56.00%	8.81%
3	Empire District Electric	\$20.47	8.10%	4.90%	72.00%	70.00%	70.00%	10.94%
4	Great Plains Energy Inc.	\$20.73	8.01%	4.90%	63.00%	61.00%	61.00%	9.80%
5	Hawaiian Electric	\$25.79	8.05%	4.90%	73.00%	67.00%	67.00%	9.95%
6	IDACORP, Inc.	\$40.66	4.00%	4.90%	48.00%	56.00%	56.00%	9.59%
7	Otter Tail Corp.	\$21.75	5.00%	4.90%	99.00%	70.00%	70.00%	NA
8	Pinnacle West Capital	\$47.88	5.37%	4.90%	62.00%	64.00%	64.00%	9.39%
9	Portland General	\$25.39	4.08%	4.90%	57.00%	54.00%	54.00%	9.25%
10	Southern Co.	\$44.22	5.13%	4.90%	72.00%	69.00%	69.00%	9.36%
11	Westar Energy	\$28.00	7.39%	4.90%	66.00%	60.00%	60.00%	9.87%
12	Average	\$32.11	5.69%	4.90%	66.36%	62.64%	62.64%	9.67%
13	Median							9.68%

Sources:

Attachment JJR-6, Page 10 of 13.

* Blue Chip Financial Forecasts, June 1, 2013 at 14.

ETI RFI 2-42 ATTACHMENT 9

Exhibit MPG-21

Southwestern Public Service Company

Valuation Metrics

Line	Company	Price to Earnings (P/E) Ratio ¹												
		12-Year Average (1)	2013 ² (2)	2012 (3)	2011 (4)	2010 (5)	2009 (6)	2008 (7)	2007 (8)	2006 (9)	2005 (10)	2004 (11)	2003 (12)	2002 (13)
1	American Electric Power	12.80	14.60	13.77	11.92	13.42	10.03	13.06	16.27	12.91	13.70	12.42	10.66	12.68
2	Cleco Corp.	14.38	18.00	15.03	13.25	12.27	13.21	14.09	19.58	17.32	15.05	13.76	12.39	12.25
3	Empire District Electric	18.07	15.60	15.76	15.76	16.75	14.34	17.26	21.70	15.92	24.50	24.81	15.83	16.18
4	Great Plains Energy	14.99	14.10	15.53	16.11	12.10	16.03	20.55	16.35	18.30	13.96	12.59	12.23	11.09
5	Hawaiian Elec.	18.28	17.40	15.81	17.09	18.59	19.79	23.16	21.57	20.33	18.27	19.18	13.76	13.47
6	IDACORP, Inc.	15.52	16.00	12.41	11.54	11.83	10.20	13.93	18.19	15.07	16.70	15.49	26.51	18.88
7	Otter Tail Corp.	26.22	20.00	21.75	47.48	55.10	31.16	30.06	19.02	17.35	15.40	17.34	17.77	16.01
8	Pinnacle West Capital	14.85	16.40	14.35	14.60	12.57	13.74	16.07	14.93	13.69	19.24	15.80	13.96	14.43
9	Portland General	14.90	17.40	13.98	12.37	12.00	14.40	16.30	11.94	23.35	N/A	N/A	N/A	N/A
10	Southern Co.	15.42	17.10	16.97	15.85	14.90	13.52	16.13	15.95	16.19	15.92	14.68	14.83	14.63
11	Westar Energy	14.22	14.00	13.43	14.78	12.96	14.95	16.96	14.10	12.18	14.79	17.44	10.78	14.02
12	Average	16.33	16.42	15.34	17.34	17.50	15.58	17.96	17.24	16.60	16.75	16.35	14.87	14.36

Line	Company	Market Price to Cash Flow (M/CF) Ratio ¹												
		12-Year		2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002
		Average	2013 ^{2a}	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
		(1)	(2)											
13	American Electric Power	5.58	6.80	6.18	5.46	5.54	4.71	5.71	6.84	5.54	6.07	5.50	4.69	5.19
14	Cleco Corp.	6.98	8.56	7.51	6.50	5.49	6.15	6.45	9.61	8.96	7.73	7.08	5.24	6.10
15	Empire District Electric	7.76	6.97	6.97	6.43	6.88	6.23	6.94	8.78	8.17	9.20	9.60	8.22	7.93
16	Great Plains Energy	6.20	5.74	6.09	5.74	4.49	5.06	7.71	7.13	7.68	6.70	6.52	5.92	5.14
17	Hawaiian Elec.	7.74	16.81	8.05	7.73	7.81	6.95	9.10	7.95	8.47	8.29	8.44	6.12	6.20
18	IDACORP, Inc.	7.13	8.21	7.16	6.75	6.67	5.31	7.10	8.23	7.73	7.55	7.15	7.27	7.53
19	Otter Tail Corp.	8.82	9.18	8.43	9.04	8.07	8.01	11.65	9.53	8.66	8.18	9.01	8.13	8.33
20	Pinnacle West Capital	5.31	6.96	6.34	5.80	5.65	3.84	4.19	4.76	4.48	7.48	5.88	4.80	5.21
21	Portland General	4.94	6.09	5.08	4.86	4.13	4.63	4.81	5.34	5.74	N/A	N/A	N/A	N/A
22	Southern Co.	8.17	8.55	8.75	8.22	7.79	7.08	8.18	8.62	8.47	8.41	8.28	8.28	7.83
23	Westar Energy	5.88	7.23	6.71	6.67	5.51	5.32	7.09	6.88	5.81	7.00	6.54	4.24	2.94
24	Average	6.77	8.28	7.02	6.66	6.18	5.75	7.18	7.61	7.24	7.66	7.40	6.29	6.24

Sources:

¹ The Value Line Investment Survey Investment Analyzer Software, downloaded on June 27, 2013.

² The Value Line Investment Survey, May 24, June 21 and August 2, 2013.

Note:

^a Based on the average of the high and low price for 2013 and the projected 2013 cash flow per share, published in The Value Line Investment Survey, May 24, June 21 and August 2, 2013.

**ETI RFI 2-42
ATTACHMENT 9**

**BEFORE THE
NEW MEXICO PUBLIC REGULATION COMMISSION**

IN THE MATTER OF SOUTHWESTERN
PUBLIC SERVICE COMPANY'S APPLICATION
FOR REVISION OF ITS RETAIL RATES UNDER
ADVICE NOTICE NO. 245,

SOUTHWESTERN PUBLIC SERVICE
COMPANY, APPLICANT

CASE NO. 12-00350-UT

STATE OF MISSOURI)
)
COUNTY OF ST. LOUIS) SS

Affidavit of Michael P. Gorman

Michael P. Gorman, being first duly sworn, on his oath states:

1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Federal Executive Agencies in this proceeding on their behalf.

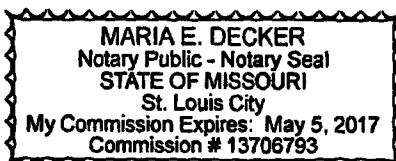
2. Attached hereto and made a part hereof for all purposes are my direct testimony and exhibits which were prepared in written form for introduction into evidence in Case No. 12-00350-UT.

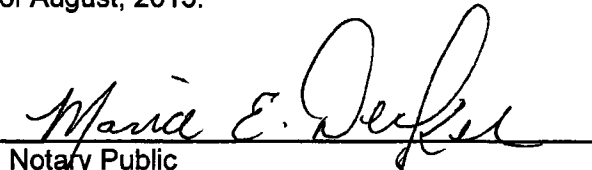
3. I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.



Michael P. Gorman

Subscribed and sworn to before me this 21st day of August, 2013.





Notary Public

**ETI RFI 2-42
ATTACHMENT 10**

EXHIBIT NO. DC WATER(B)

**BEFORE THE
PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA**

IN THE MATTER OF THE)
APPLICATION OF THE POTOMAC)
ELECTRIC POWER COMPANY)
FOR AUTHORITY TO INCREASE)
EXISTING RETAIL RATES AND)
CHARGES FOR ELECTRIC)
DISTRIBUTION SERVICE)

FORMAL CASE NO. 1103

Direct Testimony and Exhibits of

Michael P. Gorman

On behalf of

District of Columbia Water and Sewer Authority ("DC Water")

August 9, 2013



Project 9809

Exhibit No. DC WATER(B)
Michael P. Gorman
Page 1

**IN THE MATTER OF THE)
APPLICATION OF THE POTOMAC)
ELECTRIC POWER COMPANY)
FOR AUTHORITY TO INCREASE) FORMAL CASE NO. 1103
EXISTING RETAIL RATES AND)
CHARGES FOR ELECTRIC)
DISTRIBUTION SERVICE)**

1 **Q** **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,

3 Chesterfield, MO 63017.

4 **Q** **WHAT IS YOUR OCCUPATION?**

5 A I am a consultant in the field of public utility regulation and a Managing Principal of

6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q** **PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

8 A This information is included in Appendix A to my testimony.

9 **Q** **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

10 A I am appearing in this proceeding on behalf of the District of Columbia Water and

11 Sewer Authority ("DC Water").

**ETI RFI 2-42
ATTACHMENT 10**

Exhibit No. DC WATER(B)
Michael P. Gorman
Page 2

1 **Q WHAT IS THE SUBJECT OF YOUR DIRECT TESTIMONY?**

2 A In my testimony I recommend a fair overall rate of return and return on common
3 equity used to set the Potomac Electric Power Company's ("Pepco" or "Company")
4 revenue requirement in this proceeding.

5

6

SUMMARY

7 **Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.**

8 A I recommend the Public Service Commission of the District of Columbia (the
9 "Commission") award Pepco a return on common equity of 9.40%, and an overall rate
10 of return of 7.65%. Exhibit No. DC WATER(B)-1.

11 **Q WILL YOUR OVERALL RATE OF RETURN SUPPORT PEPCO'S CURRENT**
12 **FINANCIAL INTEGRITY AND INVESTMENT GRADE BOND RATING?**

13 A Yes. My recommended return on equity and Pepco's proposed capital structure will
14 provide Pepco with an opportunity to realize cash flow financial coverages and
15 balance sheet strength that conservatively support Pepco's current bond rating.
16 Consequently, my recommended return on equity represents fair compensation for
17 Pepco's investment risk, and it will preserve the Company's financial integrity and
18 credit standing.

19 **Q WILL YOU RESPOND TO PEPCO WITNESS MR. ROBERT HEVERT'S**
20 **RECOMMENDED OVERALL RATE OF RETURN IN THIS PROCEEDING?**

21 A Yes. I will also respond to Mr. Hevert's proposed return on equity of 10.25%. For the
22 reasons discussed below, Mr. Hevert's recommended return on equity is excessive
23 and should be rejected.

Q HOW DID YOU ESTIMATE PEPCO'S CURRENT MARKET COST OF EQUITY?

A I performed analyses using three Discounted Cash Flow ("DCF") models, a Risk Premium study, and a Capital Asset Pricing Model ("CAPM"). These analyses used two proxy groups of publicly traded companies that have investment risk similar to Pepco. Based on the results from these assessments, I estimate Pepco's current market cost of equity to be 9.40%.

RATE OF RETURN

Electric Utility Industry Market Outlook

Q PLEASE DESCRIBE THIS SECTION OF YOUR TESTIMONY.

A I begin my estimate of a fair return on equity for Pepco by reviewing the market's assessment of electric utility industry investment risk, credit standing, and stock price performance in general. I used this information to get a sense of the market's perception of the risk characteristics of electric utility investments in general, which is then used to produce a refined estimate of the market's return requirement for assuming investment risk similar to Pepco's utility operations.

Based on the assessments described below, I find the credit rating outlook of the industry to be strong and supportive of the industry's financial integrity, and electric utilities' stocks have exhibited strong price performance over the last several years.

Further, the electric utility industry in general is in a large capital expenditure portion of its cycle, which is creating significant demands for external capital in order to support large capital improvement programs. Credit rating agencies and market participants have embraced the utilities' need for significant amounts of external capital by meeting the capital market demands of electric utilities at near historical low

capital market costs. All of this supports my belief that Pepco should have sufficient access to capital to support its major capital program, and relatively moderate capital costs are currently available and expected to be available for the next several years.

Based on this review of credit outlooks and stock price performance, I conclude that the market continues to embrace the electric utility industry as a safe-haven investment, and views utility equity and debt investments as low-risk securities.

Q PLEASE DESCRIBE ELECTRIC UTILITIES' CREDIT RATING OUTLOOK.

A Electric utilities' credit rating outlook has improved over the recent past and is stable. S&P recently provided an assessment of the credit rating of U.S. electric utilities. S&P's commentary included the following:

Effect on ratings

Notwithstanding the slow economic recovery, credit quality in the domestic utility industry has continued a long shift to greater stability, and even modest improvement in some cases, especially as many companies re-emphasize their core competencies.

* * *

Industry Ratings Outlook

Good access to funding expected to continue

Liquidity is adequate for most utilities and investor appetite for utility debt remains healthy, with deals continuing to be oversubscribed at very attractive rates. The amount of medium- to long-term debt and hybrid securities issued through the three months ended March 31, 2013 was about \$8.7 billion. Credit fundamentals indicate that most, if not all, utilities should continue to have ample access to funding sources and credit. The relative certainty of financial performance provided by the regulatory framework under which utilities operate, their effective monopoly position, long-lived assets, and the financing necessary to fund these assets are all factors that make the utility sector attractive to investors. These elements have also helped utilities

**ETI RFI 2-42
ATTACHMENT 10**

Exhibit No. DC WATER(B)
Michael P. Gorman
Page 5

more effectively manage their rate-relief needs and mitigate the effect of sizable rate increases on customers.¹

Similarly, Fitch states:

Rating Outlook

Flat Growth Base Case: Fitch Ratings expects overall stable ratings for issuers within the U.S. Power and Gas Utility sector in 2013 despite modest deterioration in operating environment.

* * *

Stable Regulation but Authorized ROEs Trending Down

Fitch expects the downward pressure on authorized ROEs for regulated utilities to persist in tandem with falling interest rates in the economy. Lower ROEs are also associated with features increasingly common in tariff structures that minimize cash flow volatility. Many state regulators are awarding lower ROEs as an offset to awarding special tariff mechanisms such as revenue decoupling, forward test year, rate-adjustment trackers[,] etc.

* * *

Strong Liquidity Conditions to Prevail

Fitch expects the power and gas utility sectors to continue to enjoy strong capital market access. Low interest rates due to accommodative monetary policies by the Fed continue to bring down the cost of debt for companies, which represents a significant expense item for the capital-intensive utility sector. Since 2006, interest expense has declined almost 150 bps for the typical utility holding company as financing costs for new debt issuance is at historic lows and these companies have unprecedented access to the capital and bank markets.²

The Edison Electric Institute ("EEI") also opined as follows:

Steady Industry Fundamentals

Indeed, broad global macroeconomic forces have been the principle [sic] driver of utility stock returns in recent years, relative to other market sectors. Investors now take mostly as a given the

¹*Standard & Poor's Ratings Direct*: "Industry Report Card: Stable-To-Modestly Improved Industry Outlook Supports Ratings For U.S. Regulated Electric, Gas, And Water Utilities," April 19, 2013 at 3-4 and 6-7, emphasis added.

²*FitchRatings*: "2013 Outlook: Utilities, Power, and Gas," December 7, 2012 at 1, 6-7 and 10, emphasis added.

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ATTACHMENT 10**

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Michael P. Gorman
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1 industry's reasonably strong business fundamentals. Utilities are
2 undertaking sizeable and wide-ranging capital investment programs
3 that include distribution network upgrades, Smart Grid investments, a
4 significant boost in the pace of transmission investment, rising
5 emissions-related capex driven by the need to comply with EPA
6 regulations, and generation investments in select power markets.

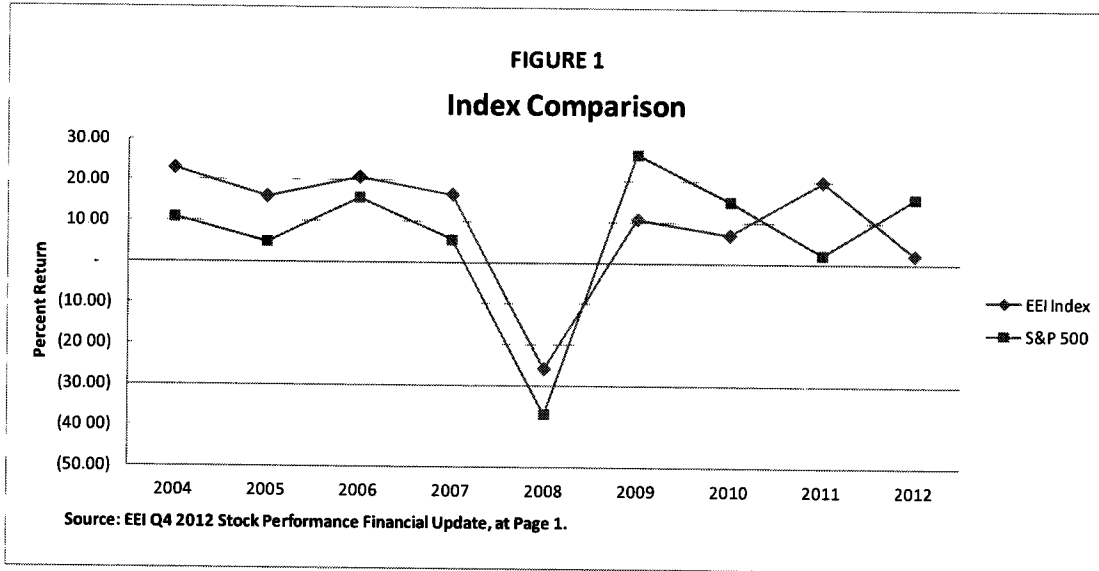
* * *

8 Credit analysts are generally positive on the industry's ability to finance
9 an aggressive pace of investment, noting that while it is now cash flow
10 negative on an annual operating basis, its balance sheets are
11 generally strong and utilities have access to a diverse range of funding
12 sources. The industry weathered the storm of the 2008/2009 financial
13 crisis by postponing optional capex projects and finding cost savings
14 where possible without jeopardizing service quality. Today's economic
15 backdrop is much improved from that period, and with interest rates at
16 multi-decade lows and investors of all types hungry for yield, the
17 capital markets are wide open for most economic sectors, including
18 utilities. The execution risk inherent in managing large, complex
19 construction projects in a way that addresses the interests of both
20 shareholders and regulators seems far more pronounced than
21 financing risk.³

22 **Q PLEASE DESCRIBE ELECTRIC UTILITY STOCK PRICE PERFORMANCE OVER**
23 **THE LAST SEVERAL YEARS.**

24 **A** As shown in the graph below, the EEI has recorded electric utility stock price
25 performance compared to the market. The EEI data shows that its Electric Utility
26 Index has outperformed the market in downturns and trailed the market during
27 recovery. This supports my conclusion that utility stock investments are regarded by
28 market participants as a moderate to low-risk investment.

³EEI Q3 2012 Financial Update "Stock Performance" at 5, emphasis added.



EEI describes electric utility stock price/valuation as sustainable:

Mixed Valuation Signals

The broad market's gains during Q3 along with the EEI Index's flat performance removed some of the richness to utility share valuations that several analysts noted at the end of Q2. Indeed, the magnitude of underperformance for the first nine months of 2012 is similar to that which occurred during the same period of 2009, after markets bottomed and then recovered from the losses produced by the financial crisis. As the market recovery continued in 2010, with 14% to 17% gains, the staid utility sector's 7% return could not keep pace. Yet when 2011 produced worries of economic slowdown, the worsening of the European debt crisis and the summer's woefully memorable deficit gridlock and S&P downgrade of U.S. Treasury debt in August — along with sharply falling interest rates — the EEI Index powered forward with a 20% return against single-digit gains across the broader markets.

With the industry business models now set on regulated or mostly regulated structures, and with slow growth in earnings and dividends as the main appeal for investors, such periodic reversals of fortune, driven by changing economic prospects and investor sentiments, seem likely to continue. Interest rates are now at multi-decade lows and while analysts still cite utility price/earnings ratios as above average, 4% dividend yields

1 give utility shares considerable price support relative to the
2 lower yields available from bonds.⁴

3 **Q WHAT ARE THE IMPORTANT TAKEAWAY POINTS FROM THIS ASSESSMENT**
4 **OF ELECTRIC UTILITY INDUSTRY CREDIT AND INVESTMENT RISK**
5 **OUTLOOKS?**

6 **A Credit rating agencies consider the electric utility industry to be stable and believe**
7 investors will continue to provide an abundance of capital to support utilities' large
8 capital programs and at moderate capital costs. All of this supports the continued
9 belief that electric utility investments are generally regarded as safe-haven or low-risk
10 investments, and the market embraces low-risk investments – like utility investments.
11 The demand for low-risk investments will provide funding for electric utilities in
12 general.

13 **Pepco Investment Risk**

14 **Q PLEASE DESCRIBE THE MARKET'S ASSESSMENT OF THE INVESTMENT RISK**
15 **OF PEPCO.**

16 **A The market assessment of Pepco's investment risk is best described by credit rating**
17 analysts' reports. Pepco's current corporate bond ratings from S&P and Moody's are
18 "BBB+" and "Baa," respectively. Both rating agencies have a Stable outlook for
19 Pepco.⁵

⁴*Id.* at 6, emphasis added.

⁵Hevert Direct at 9.

Specifically, S&P states the following:

Rationale

Standard & Poor's Ratings Services bases its rating on Potomac Electric Power Co. on the consolidated credit profile of holding company PEPCO Holdings Inc. (PHI). This includes an "excellent" business risk profile and a "significant" financial risk profile (as our criteria define the terms).

* * *

The excellent business risk profile for Potomac Electric incorporates PHI's strategy to be a utility holding company that owns three utilities serving customers in four jurisdictions in the mid-Atlantic region.

* * *

The utilities' strengths include the lack of competition, increasing energy use by residential and commercial customers, and the absence of generation-related operating risk. Also, the utilities' ability to pass through power costs to ratepayers without a rate case provides additional credit support.⁶

Pepco's Proposed Capital Structure

Q WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN THIS PROCEEDING?

A Pepco's March 2013 forecasted regulatory capital structure, as supported by Pepco witness Mr. Frederick J. Boyle, is shown below in Table 1.

⁶*Standard & Poor's RatingsDirect*: "Summary: Potomac Electric Power Co.," January 22, 2013 at 2.

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**Pepco's Proposed
Capital Structure
(3/31/2013)**

<u>Description</u>	<u>Weight</u>
Long-Term Debt	50.81%
Common Equity	<u>49.19%</u>
Total Capital Structure	100.00%

Source: Boyle Supplemental Direct, PEPCO (2A).

1 Q DO YOU TAKE ISSUE WITH PEPSCO'S PROPOSED CAPITAL STRUCTURE?

2 A No.

3 Q WILL THIS PROPOSED CAPITAL STRUCTURE SUPPORT PEPCO'S FINANCIAL
4 INTEGRITY AND CREDIT RATING?

5 A Yes. As I will discuss later in my testimony, Pepco's proposed capital structure is
6 consistent with Pepco's current credit rating and will support Pepco's financial
7 integrity.

RETURN ON EQUITY

9 Q PLEASE DESCRIBE WHAT IS MEANT BY A “UTILITY’S COST OF COMMON
10 EQUITY.”

11 A A utility's cost of common equity is the return investors require on an investment in
12 the utility. Investors expect to achieve their return requirement from receiving
13 dividends and stock price appreciation.

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1 **Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**
2 **UTILITY'S COST OF COMMON EQUITY.**

3 **A In general, determining a fair cost of common equity for a regulated utility has been**
4 framed by two hallmark decisions of the U.S. Supreme Court: Bluefield Water Works
5 & Improvement Co. v. Pub. Serv. Comm'n of W. Va., 262 U.S. 679 (1923) and Fed.
6 Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

7 These decisions identify the general standards to be considered in
8 establishing the cost of common equity for a public utility. Those general standards
9 provide that the authorized return should: (1) be sufficient to maintain financial
10 integrity; (2) attract capital under reasonable terms; and (3) be commensurate with
11 returns investors could earn by investing in other enterprises of comparable risk.

12 **Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE PEPCO'S**
13 **COST OF COMMON EQUITY.**

14 **A I have used several models based on financial theory to estimate Pepco's cost of**
15 common equity. These models are: (1) a constant growth Discounted Cash Flow
16 ("DCF") model using consensus analysts' growth rate projections; (2) a constant
17 growth DCF using sustainable growth rate estimates; (3) a multi-stage growth DCF
18 model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I
19 have applied these models to two groups of publicly traded utilities that I have
20 determined share investment risk similar to Pepco's.

Risk Proxy Groups

Q HOW DID YOU SELECT UTILITY PROXY GROUPS SIMILAR IN INVESTMENT RISK TO PEPCO TO ESTIMATE ITS CURRENT MARKET COST OF EQUITY?

A I relied on two proxy groups: (1) an Electric utility proxy group, and (2) a T&D proxy group. These are the same two proxy groups used by Pepco's witness Mr. Hevert to estimate Pepco's return on equity.

Q PLEASE DESCRIBE WHY YOU BELIEVE THE ELECTRIC PROXY GROUP IS REASONABLY COMPARABLE IN INVESTMENT RISK TO PEPCO.

A The Electric proxy group is shown in Exhibit No. DC WATER(B)-2, page 1. The Electric proxy group has an average corporate credit rating from S&P of "BBB," which is similar to S&P's corporate credit rating for Pepco of "BBB+." The Electric proxy group's corporate credit rating from Moody's of "Baa2" is identical to Pepco's corporate credit rating from Moody's. The comparable bond rating indicates that the Electric proxy group has reasonably comparable investment risk to Pepco.

The Electric proxy group has an average common equity ratio of 49.1% (including short-term debt) from SNL Financial ("SNL") and 52.0% (excluding short-term debt) from *The Value Line Investment Survey* ("*Value Line*") in 2012. The Electric proxy group's common equity ratio is significantly lower than the 49.8% common equity ratio proposed by the Company.

I also compared Pepco's business risk to the business risk of the Electric proxy group based on S&P's ranking methodology. Pepco has an S&P business risk profile of "Excellent," which is identical to the S&P business risk profile of the Electric

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1 proxy group. The S&P business risk profile score indicates that Pepco's business risk
2 is comparable to that of the Electric proxy group.⁷

3 I believe that the Electric proxy group reasonably approximates the investment
4 risk of Pepco, and can be used to estimate a fair return on equity for Pepco.

5 **Q PLEASE DESCRIBE WHY YOU BELIEVE THE T&D PROXY GROUP IS**
6 **REASONABLY COMPARABLE IN INVESTMENT RISK TO PEPCO.**

7 **A** The T&D proxy group is shown in Exhibit No. DC WATER(B)-2, page 2. The T&D
8 proxy group has an average corporate credit rating from S&P of "A-," which is similar
9 to S&P's corporate credit rating for Pepco of "BBB+." The T&D proxy group's
10 corporate credit rating from Moody's of "Baa2" is identical to Pepco's corporate credit
11 rating from Moody's. The comparable bond rating indicates that the T&D proxy group
12 has reasonably comparable investment risk to Pepco.

13 The T&D proxy group has an average common equity ratio of 42.3%
14 (including short-term debt) from SNL Financial ("SNL") and 46.2% (excluding short-
15 term debt) from *The Value Line Investment Survey* ("Value Line") in 2012. The T&D
16 proxy group's common equity ratio is significantly lower than the 49.8% common
17 equity ratio proposed by the Company.

18 Pepco's business risk is also comparable to the business risk of the T&D
19 proxy group based on S&P's ranking methodology. Pepco has an S&P business risk
20 profile of "Excellent," which is identical to the S&P business risk profile of the T&D

⁷S&P ranks the business risk of a utility company as part of its corporate credit rating review. S&P considers total investment risk in assigning bond ratings to issuers, including utility companies. In analyzing total investment risk, S&P considers both the business risk and the financial risk of a corporate entity, including a utility company. S&P's business risk profile score is based on a six-notch credit rating starting with "Vulnerable" (highest risk) to "Excellent" (lowest risk). The business risk of most utility companies falls within the lowest risk category, "Excellent," or the category one notch lower (more risk), "Strong." *Standard & Poor's RatingsDirect: "Criteria Methodology: Business Risk/Financial Risk Matrix Expanded,"* May 27, 2009.

proxy group. The S&P business risk profile score indicates that Pepco's business risk is comparable to that of the T&D proxy group.⁸

I believe that the T&D proxy group reasonably approximates the investment risk of Pepco, and can be used to estimate a fair return on equity for Pepco.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return or cost of capital. This model is expressed mathematically as follows:

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} + \dots + \frac{D_\infty}{(1+K)^\infty} \quad \text{where} \quad (\text{Equation 1})$$

P_0 = Current stock price

D = Dividends in periods 1 - ∞

K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor-required return, "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

$$K = D_1/P_0 + G \quad (\text{Equation 2})$$

K = Investor's required return

D_1 = Dividend in first year

P_0 = Current stock price

G = Expected constant dividend growth rate

⁸*Id.*

Equation 2 is referred to as the annual "constant growth" DCF model.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown in Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices of the utilities in the proxy group over a 13-week period ending on July 12, 2013. An average stock price is less susceptible to market price variations than a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock's long-term value.

A 13-week average stock price reflects a period that is still short enough to contain data that reasonably reflect current market expectations, but the period is not so short as to be susceptible to market price variations that may not reflect the stock's long-term value. In my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and the need to capture sufficient data to smooth out aberrant market movements.

Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

A I used the most recently paid quarterly dividend, as reported in *Value Line*.⁹ This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D_1 factor for use in Equation 2 above.

⁹The *Value Line Investment Survey*, May 3, May 24, and June 21, 2013.

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1 **Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT**
2 **GROWTH DCF MODEL?**

3 **A**There are several methods that can be used to estimate the expected growth in
4 dividends. However, regardless of the method, for purposes of determining the
5 market-required return on common equity, one must attempt to estimate investors'
6 consensus about what the dividend or earnings growth rate will be, and not what an
7 individual investor or analyst may use to make individual investment decisions.

8 As predictors of future returns, security analysts' growth estimates have been
9 shown to be more accurate than growth rates derived from historical data.¹⁰ That is,
10 assuming the market generally makes rational investment decisions, analysts' growth
11 projections are more likely to influence observable stock prices than growth rates
12 derived only from historical data.

13 For my constant growth DCF analysis, I have relied on a consensus, or mean,
14 of professional security analysts' earnings growth estimates as a proxy for investor
15 consensus dividend growth rate expectations. I used the average of analysts' growth
16 rate estimates from three sources: Zacks, SNL, and Reuters. All such projections
17 were available on July 12, 2013, and all were reported online.

18 Each consensus growth rate projection is based on a survey of security
19 analysts. There is no clear evidence whether a particular analyst is most influential
20 on general market investors. Therefore, a single analyst's projection does not as
21 reliably predict consensus investor outlooks as does a consensus of market analysts'
22 projections. The consensus estimate is a simple arithmetic average, or mean, of
23 surveyed analysts' earnings growth forecasts. A simple average of the growth
24 forecasts gives equal weight to all surveyed analysts' projections. Therefore, a

¹⁰See, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," *The Journal of Portfolio Management*, Spring 1989.