MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

COST OF SERVICE

REVENUE REQUIREMENT

APPENDIX 2

Support for Staff Cost of Capital Recommendations

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2014-0351

Jefferson City, Missouri January 2015

AN ANALYSIS OF THE COST OF CAPITAL

FOR

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2014-0351

SCHEDULES

BY

SHANA GRIFFIN

REGULATORY REVIEW DIVISION - UTILITY SERVICES

MISSOURI PUBLIC SERVICE COMMISSION

JANUARY 2015

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Federal Reserve Discount Rate and Federal Reserve Funds Rate Changes

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserv Funds Rate
01/01/83	8.50%		06/30/99	4.50%	5.00%
12/31/83	8.50%		08/24/99	4.75%	5.25%
04/09/84	9.00%		11/16/99	5.00%	5.50%
11/21/84	8.50%		02/02/00	5.25%	5.75%
12/24/84	8.00%		03/21/00	5.50%	6.00%
05/20/85	7.50%		05/19/00	6.00%	6.50%
03/07/86	7.00%		01/03/01	5.75%	6.00%
04/21/86	6.50%		01/04/01	5.50%	6.00%
07/11/86	6.00%		01/31/01	5.00%	5.50%
08/21/86	5.50%		03/20/01	4.50%	5.00%
09/04/87	6.00%		04/18/01	4.00%	4.50%
08/09/88	6.50%		05/15/01	3.50%	4.00%
02/24/89	7.00%		06/27/01	3.25%	3.75%
07/13/90	7.0076	8.00% *	08/21/01	3.00%	3.50%
10/29/90		7.75%	09/17/01	2.50%	3.00%
11/13/90			10/02/01	2.00%	
		7.50%			2.50%
12/07/90		7.25%	11/06/01	1.50%	2.00%
12/18/90	0 500/	7.00%	12/11/01	1.25%	1.75%
12/19/90	6.50%	0.750/	11/06/02	0.75%	1.25%
01/09/91	0.000/	6.75%	01/09/03	2.25%**	1.25%
02/01/91	6.00%	6.25%	06/25/03	2.00%	1.00%
03/08/91		6.00%	06/30/04	2.25%	1.25%
04/30/91	5.50%	5.75%	08/10/04	2.50%	1.50%
08/06/91		5.50%	09/21/04	2.75%	1.75%
09/13/91	5.00%	5.25%	11/10/04	3.00%	2.00%
10/31/91		5.00%	12/14/04	3.25%	2.25%
11/06/91	4.50%	4.75%	02/02/05	3.50%	2.50%
12/06/91		4.50%	03/22/05	3.75%	2.75%
12/20/91	3.50%	4.00%	05/03/05	4.00%	3.00%
04/09/92		3.75%	06/30/05	4.25%	3.25%
07/02/92	3.00%	3.25%	08/09/05	4.50%	3.50%
09/04/92		3.00%	09/20/05	4.75%	3.75%
01/01/93			11/01/05	5.00%	4.00%
12/31/93	No Changes	No Changes	12/13/05	5.25%	4.25%
02/04/94		3.25%	01/31/06	5.50%	4.50%
03/22/94		3.50%	03/28/06	5.75%	4.75%
04/18/94		3.75%	05/10/06	6.00%	5.00%
05/17/94	3.50%	4.25%	06/29/06	6.25%	5.25%
08/16/94	4.00%	4.75%	08/17/07	5.75%	5.25%
11/15/94	4.75%	5.50%	09/18/07	5.25%	4.75%
02/01/95	5.25%	6.00%	10/31/07	5.00%	4.50%
07/06/95		5.75%	12/11/07	4.75%	4.25%
12/19/95		5.50%	01/22/08	4.00%	3.50%
01/31/96	5.00%	5.25%	01/30/08	3.50%	3.00%
03/25/97	0.0070	5.50%	03/16/08	3.25%	0.0070
12/12/97	5.00%	0.0070	03/18/08	2.50%	2.25%
01/09/98	5.00%		04/30/08	2.25%	2.23%
01/09/98	5.00%		10/08/08	1.75%	1.50%
	5.00%	5 25%			
09/29/98	4 750/	5.25%	10/28/08	1.25%	1.00%
10/15/98	4.75%	5.00%	12/30/08	0.50%	0%25%
11/17/98	4.50%	4.75%	02/19/10	0.75%	

* Staff began tracking the Federal Funds Rate.

**Revised discount window program begins. Reflects rate on primary credit. This revised discount window policy results in incomparability of the discount rates after January 9, 2003 to discount rates before January 9, 2003.

Source:

Federal Reserve Discount rate Federal Reserve Funds rate http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html

Note: Interest rates as of December 31 for each year are underlined.



SCHEDULE 2-2

Rate of Inflation

Mo/Year Jan 1980	Rate (%) 13.90	Mo/Year Jan 1984	Rate (%) 4.20	Mo/Year Jan 1988	Rate (%) 4.00	Mo/Year Jan 1992	Rate (%)	Mo/Year Jan 1996	Rate (%) 2.70	Mo/Year Jan 2000	Rate (%)	Mo/Year Jan 2004	Rate (%) 1.90	Mo/Year Jan 2008	Rate (%) 4.30	Mo/Year Jan 2012	Rate (%) 2.90
Feb	14.20	Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70	Feb	3.20	Feb	1.30	Feb	4.00	Feb	2.90
Mar	14.80	Mar	4.80	Mar	3.90	Mar	3.20	Mar	2.80	Mar	3.70	Mar	1.70	Mar	4.00	Mar	2.70
Apr	14.70	Apr	4.60	Apr	3.90	Apr	3.20	Apr	2.90	Apr	3.00	Apr	2.30	Apr	3.90	Apr	2.30
May	14.40	May	4.20	May	3.90	May	3.00	May	2.90	May	3.20	May	3.10	May	4.20	May	1.70
Jun	14.40	Jun	4.20	Jun	4.00	Jun	3.10	Jun	2.80	Jun	3.70	Jun	3.30	Jun	5.00	Jun	1.70
Jul	13.10	Jul	4.20	Jul	4.10	Jul	3.20	Jul	3.00	Jul	3.70	Jul	3.00	Jul	5.60	Jul	1.40
Aug	12.90	Aug	4.30	Aug	4.00	Aug	3.10	Aug	2.90	Aug	3.40	Aug	2.70	Aug	5.40	Aug	1.70
Sep	12.60	Sep	4.30	Sep	4.20	Sep	3.00	Sep	3.00	Sep	3.50	Sep	2.50	Sep	4.90	Sep	2.00
Oct	12.80	Oct	4.30	Oct	4.20	Oct	3.20	Oct	3.00	Oct	3.40	Oct	3.30	Oct	3.70	Oct	2.20
Nov	12.60	Nov	4.10	Nov	4.20	Nov	3.00	Nov	3.30	Nov	3.40	Nov	3.50	Nov	1.10	Nov	1.80
Dec	12.50	Dec	3.90	Dec	4.40	Dec	2.90	Dec	3.30	Dec	3.40	Dec	3.30	Dec	0.10	Dec	1.70
Jan 1981	11.80	Jan 1985	3.50	Jan 1989	4.70	Jan 1993	3.30	Jan 1997	3.00	Jan 2001	3.70	Jan 2005	3.00	Jan 2009	0.00	Jan 2013	1.60
Feb	11.40	Feb	3.50	Feb	4.80	Feb	3.20	Feb	3.00	Feb	3.50	Feb	3.00	Feb	0.20	Feb	2.00
Mar	10.50	Mar	3.70	Mar	5.00	Mar	3.10	Mar	2.80	Mar	2.90	Mar	3.10	Mar	-0.40	Mar	1.50
Apr	10.00	Apr	3.70	Apr	5.10	Apr	3.20	Apr	2.50	Apr	3.30	Apr	3.50	Apr	-0.70	Apr	1.10
May	9.80	May	3.80	May	5.40	May	3.20	May	2.20	May	3.60	May	2.80	May	-1.28	May	1.40
Jun	9.60	Jun	3.80	Jun	5.20	Jun	3.00	Jun	2.30	Jun	3.20	Jun	2.50	Jun	-1.40	Jun	1.80
Jul	10.80	Jul	3.60	Jul	5.00	Jul	2.80	Jul	2.20	Jul	2.70	Jul	3.20	Jul	-2.10	Jul	2.00
Aug	10.80	Aug	3.30	Aug	4.70	Aug	2.80	Aug	2.20	Aug	2.70	Aug	3.60	Aug	-1.50	Aug	1.50
Sep	11.00	Sep	3.10	Sep	4.30	Sep	2.70	Sep	2.20	Sep	2.60	Sep	4.70	Sep	-1.30	Sep	1.20
Oct	10.10	Oct	3.20	Oct	4.50	Oct	2.80	Oct	2.10	Oct	2.10	Oct	4.30	Oct	-0.20	Oct	1.00
Nov	9.60	Nov	3.50	Nov	4.70	Nov	2.70	Nov	1.80	Nov	1.90	Nov	3.50	Nov	1.80	Nov	1.20
Dec	8.90	Dec	3.80	Dec	4.60	Dec	2.70	Dec	1.70	Dec	1.60	Dec	3.40	Dec	2.70	Dec	1.50
Jan 1982	8.40	Jan 1986	3.90	Jan 1990	5.20	Jan 1994	2.50	Jan 1998	1.60	Jan 2002	1.10	Jan 2006	4.00	Jan 2010	2.60	Jan 2014	1.60
Feb	7.60	Feb	3.10	Feb	5.30	Feb	2.50	Feb	1.40	Feb	1.10	Feb	3.60	Feb	2.10	Feb	1.10
Mar	6.80	Mar	2.30	Mar	5.20	Mar	2.50	Mar	1.40	Mar	1.50	Mar	3.40	Mar	2.30	Mar	1.50
Apr	6.50	Apr	1.60	Apr	4.70	Apr	2.40	Apr	1.40	Apr	1.60	Apr	3.50	April	2.20	Apr	2.00
May	6.70	May	1.50	May	4.40	May	2.30	May	1.70	May	1.20	May	4.20	May	2.00	May	2.10
Jun	7.10	Jun	1.80	Jun	4.70	Jun	2.50	Jun	1.70	Jun	1.10	June	4.30	Jun	1.10	Jun	2.10
Jul	6.40	Jul	1.60	Jul	4.80	Jul	2.90	Jul	1.70	Jul	1.50	July	4.10	Jul	1.20	Jul	2.00
Aug	5.90	Aug	1.60	Aug	5.60	Aug	3.00	Aug	1.60	Aug	1.80	Aug	3.80	Aug	1.10	Aug	1.70
Sep	5.00	Sep	1.80	Sep	6.20	Sep	2.60	Sep	1.50	Sep	1.50	Sep	2.10	Sep	1.10	Sep	1.70
Oct	5.10	Oct	1.50	Oct	6.30	Oct	2.70	Oct	1.50	Oct	2.00	Oct	1.30	Oct	1.20	Oct	1.70
Nov	4.60	Nov	1.30	Nov	6.30	Nov	2.70	Nov	1.50	Nov	2.20	Nov	2.00	Nov	1.10	Nov	1.30
Dec	3.80	Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60	Dec	2.40	Dec	2.50	Dec	1.50	Dec	0.80
Jan 1983	3.70	Jan 1987	1.50 2.10	Jan 1991	5.70	Jan 1995	2.90 2.90	Jan 1999	1.70	Jan 2003	2.60	Jan 2007	2.10	Jan 2011	1.60		
Feb	3.50	Feb		Feb	5.30	Feb		Feb	1.60	Feb	3.00 3.00	Feb	2.40	Feb	2.10		
Mar	3.60 3.90	Mar Apr	3.00 3.80	Mar Apr	4.90 4.90	Mar	3.10 2.40	Mar	1.70 2.30	Mar	2.20	Mar	2.80 2.60	Mar Apr	2.70 3.20		
Apr	3.90	•	3.90		5.00	Apr	3.20	Apr May	2.30	Apr May	2.20	Apr May	2.80	May	3.60		
May Jun	2.60	May Jun	3.90	May Jun	4.70	May Jun	3.20	Jun	2.10	Jun	2.10	Jun	2.70	Jun	3.60		
Jul	2.50	Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.00	Jul	2.10	Jul	2.40	Jul	3.60		
Aug	2.50	Aug	4.30	Aug	3.80	Aug	2.60	Aug	2.10	Aug	2.10	Aug	2.40	Aug	3.80		
Sep	2.00	Sep	4.30	Sep	3.40	Sep	2.00	Sep	2.60	Sep	2.20	Sep	2.80	Sep	3.90		
Oct	2.90	Oct	4.40	Oct	2.90	Oct	2.30	Oct	2.60	Oct	2.00	Oct	3.50	Oct	3.50		
Nov	3.30	Nov	4.50	Nov	3.00	Nov	2.60	Nov	2.60	Nov	1.80	Nov	4.30	Nov	3.40		
Dec	3.80	Dec	4.40	Dec	3.10	Dec	2.50	Dec	2.00	Dec	1.90	Dec	4.10	Dec	3.00		
	0.00				0.10		2.00		2						0.00		

Source: U.S. Dept of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers,

Change for 12-Month Period, Bureau of Labor Statistics,

http://www.bls.gov/schedule/archives/cpi nr.htm



The Empire District Electric Company Case No. ER-2014-0351 Average Yields on AA, A and BBB Public Utility Bonds

Mo/Year Jan 1980	Rate (%) 12.12	Mo/Year Jan 1984	Rate (%) 13.40	Mo/Year Jan 1988	Rate (%) 10.75	Mo/Year Jan 1992	Rate (%) 8.67	Mo/Year Jan 1996	Rate (%) 7.20	Mo/Year Jan 2000	Rate (%) 8.22	Mo/Year Jan 2004	Rate (%) 6.23	Mo/Year Jan 2008	Rate (%) 6.08	Mo/Year Jan 2012	Rate (%) 4.97
Feb	13.48	Feb	13.50	Feb	10.11	Feb	8.77	Feb	7.37	Feb	8.10	Feb	6.17	Feb	6.28	Feb	4.99
Mar	14.33	Mar	14.03	Mar	10.11	Mar	8.84	Mar	7.72	Mar	8.14	Mar	6.01	Mar	6.29	Mar	5.13
Apr	13.50	Apr	14.30	Apr	10.53	Apr	8.79	Apr	7.88	Apr	8.14	Apr	6.38	Apr	6.36	Apr	5.05
May	12.17	May	14.95	May	10.75	May	8.72	May	7.99	May	8.55	May	6.68	May	6.38	May	4.84
Jun	11.87	Jun	15.16	Jun	10.71	Jun	8.64	Jun	8.07	Jun	8.22	Jun	6.53	Jun	6.50	Jun	4.67
Jul Aug	12.12 12.82	Jul Aug	14.92 14.29	Jul Aug	10.96 11.09	Jul Aug	8.46 8.34	Jul Aug	8.02 7.84	Jul Aug	8.17 8.05	Jul Aug	6.34 6.18	Jul Aug	6.50 6.48	Jul Aug	4.56 4.71
Sep	13.29	Sep	14.04	Sep	10.56	Sep	8.34	Sep	8.01	Sep	8.16	Sep	6.01	Sep	6.59	Sep	4.75
Oct	13.53	Oct	13.68	Oct	9.92	Oct	8.44	Oct	7.76	Oct	8.08	Oct	5.95	Oct	7.70	Oct	4.69
Nov	14.07	Nov	13.15	Nov	9.89	Nov	8.53	Nov	7.48	Nov	8.03	Nov	5.97	Nov	7.80	Nov	4.53
Dec	14.48	Dec	12.96	Dec	10.02	Dec	8.36	Dec	7.58	Dec	7.79	Dec	5.93	Dec	6.87	Dec	4.28
Jan 1981	14.22	Jan 1985	12.88	Jan 1989	10.02	Jan 1993	8.23	Jan 1997	7.79	Jan 2001	7.76	Jan 2005	5.80	Jan 2009	6.77	Jan 2013	4.45
Feb	14.84	Feb	13.00	Feb	10.02	Feb	8.00	Feb	7.68	Feb	7.69	Feb	5.64	Feb	6.72	Feb	4.49
Mar	14.86	Mar	13.66	Mar	10.16	Mar	7.85	Mar	7.92	Mar	7.59	Mar	5.86	Mar	6.85	Mar	4.45
Apr	15.32	Apr	13.42	Apr	10.14	Apr	7.76	Apr	8.08	Apr	7.81	Apr	5.72	Apr	6.90	Apr	4.19
May	15.84	May	12.89	May	9.92	May	7.78	May	7.94	May	7.88	May	5.60	May	6.83	May	4.36
-	15.27	•	12.09	•	9.92 9.49	-	7.68	•	7.54	•	7.00	•	5.39	,	6.54	•	4.30
Jun	15.27	Jun Jul	11.88	Jun	9.49 9.34	Jun	7.53	Jun	7.52	Jun Jul	7.75	Jun Jul	5.50	June		Jun	4.70
Jul				Jul		Jul		Jul						July	6.15	Jul	
Aug	16.33	Aug	11.93	Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57	Aug	5.51	Aug	5.80	Aug	5.00
Sep	16.89	Sep	11.95	Sep	9.43	Sep	7.01	Sep	7.50	Sep	7.73	Sep	5.54	Sep	5.60	Sep	5.05
Oct	16.76	Oct	11.84	Oct	9.37	Oct	6.99	Oct	7.37	Oct	7.64	Oct	5.79	Oct	5.64	Oct	4.94
Nov	15.50	Nov	11.33	Nov	9.33	Nov	7.30	Nov	7.24	Nov	7.61	Nov	5.88	Nov	5.71	Nov	5.04
Dec	15.77	Dec	10.82	Dec	9.31	Dec	7.33	Dec	7.16	Dec	7.86	Dec	5.83	Dec	5.86	Dec	5.09
Jan 1982	16.73	Jan 1986	10.66	Jan 1990	9.44	Jan 1994	7.31	Jan 1998	7.03	Jan 2002	7.69	Jan 2006	5.77	Jan 2010	5.83	Jan 2014	4.91
Feb	16.72	Feb	10.16	Feb	9.66	Feb	7.44	Feb	7.09	Feb	7.62	Feb	5.83	Feb	5.94	Feb	4.79
Mar	16.07	Mar	9.33	Mar	9.75	Mar	7.83	Mar	7.13	Mar	7.83	Mar	5.98	Mar	5.90	Mar	4.74
Apr	15.82	Apr	9.02	Apr	9.87	Apr	8.20	Apr	7.12	Apr	7.74	Apr	6.28	Apr	5.87	Apr	4.62
May	15.60	May	9.52	May	9.89	May	8.32	May	7.11	May	7.76	May	6.39	May	5.59	May	4.46
Jun	16.18	Jun	9.51	Jun	9.69	Jun	8.31	Jun	6.99	Jun	7.67	June	6.39	June	5.62	Jun	4.48
Jul	16.04	Jul	9.19	Jul	9.66	Jul	8.47	Jul	6.99	Jul	7.54	July	6.37	July	5.41	Jul	4.37
Aug	15.22	Aug	9.15	Aug	9.84	Aug	8.41	Aug	6.96	Aug	7.34	Aug	6.20	Aug	5.10	Aug	4.29
Sep	14.56	Sep	9.42	Sep	10.01	Sep	8.65	Sep	6.88	Sep	7.23	Sep	6.03	Sep	5.10	Sep	4.37
Oct	13.88	Oct	9.39	Oct	9.94	Oct	8.88	Oct	6.88	Oct	7.43	Oct	6.01	Oct	5.20	Oct	4.20
Nov	13.58	Nov	9.15	Nov	9.76	Nov	9.00	Nov	6.96	Nov	7.31	Nov	5.82	Nov	5.45	Nov	4.25
Dec	13.55	Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84	Dec	7.20	Dec	5.83	Dec	5.61	Dec	4.12
Jan 1983	13.46	Jan 1987	8.77	Jan 1991	9.56	Jan 1995	8.77	Jan 1999	6.87	Jan 2003	7.13	Jan 2007	5.96	Jan 2011	5.69		
Feb	13.60	Feb	8.81	Feb	9.31	Feb	8.56	Feb	7.00	Feb	6.92	Feb	5.91	Feb	5.82		
Mar	13.28	Mar	8.75	Mar	9.39	Mar	8.41	Mar	7.18	Mar	6.80	Mar	5.87	Mar	5.74		
Apr	13.03	Apr	9.30	Apr	9.30	Apr	8.30	Apr	7.16	Apr	6.68	Apr	6.01	Apr	5.76		
May	13.00	May	9.82	May	9.29	May	7.93	May	7.42	May	6.35	May	6.03	May	5.57		
Jun	13.17	Jun	9.87	Jun	9.44	Jun	7.62	Jun	7.70	Jun	6.21	June	6.34	June	5.52		
Jul	13.28	Jul	10.01	Jul	9.40	Jul	7.73	Jul	7.66	Jul	6.54	July	6.28	July	5.61		
Aug	13.50	Aug	10.33	Aug	9.16	Aug	7.86	Aug	7.86	Aug	6.78	Aug	6.28	Aug	5.26		
Sep	13.35	Sep	11.00	Sep	9.03	Sep	7.62	Sep	7.87	Sep	6.58	Sep	6.24	Sep	5.01		
Oct	13.35	Oct	11.32	Oct	9.03 8.99	Oct	7.46	Oct	8.02	Oct	6.50	Oct	6.17	Oct	5.11		
Nov	13.33	Nov	10.82	Nov	8.93	Nov	7.40	Nov	7.86	Nov	6.44	Nov	6.04	Nov	5.00		
Dec	13.48	Dec	10.99	Dec	8.76	Dec	7.21	Dec	8.04	Dec	6.36	Dec	6.23	Dec	4.96		

Source:

Mergent Bond Record (through November 2010); BondsOnline (December 2010 to present)

The Empire District Electric Company Case No. ER-2014-0351 Average Yields on Thirty-Year U.S. Treasury Bonds

Mo/Year Jan 1980	Rate (%) 10.60	Mo/Year Jan 1984	Rate (%) 11.75	Mo/Year Jan 1988	Rate (%) 8.83	Mo/Year Jan 1992	Rate (%) 7.58	Mo/Year Jan 1996	Rate (%) 6.05	Mo/Year Jan 2000	Rate (%) 6.63	Mo/Year Jan 2004	Rate (%) 4.99	Mo/Year Jan 2008	Rate (%) 4.33	Mo/Year Jan 2012	Rate (%) 3.03
Feb	12.13	Feb	11.95	Feb	8.43	Feb	7.85	Feb	6.24	Feb	6.23	Feb	4.99	Feb	4.53	Feb	3.03
Mar	12.13	Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.60	Mar	6.05	Mar	4.55	Mar	4.39	Mar	3.28
Apr	11.40	Apr	12.65	Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85	Apr	5.14	Apr	4.44	Apr	3.18
May	10.36	May	13.43	May	9.23	May	7.89	May	6.93	May	6.15	May	5.42	May	4.60	May	2.93
Jun	9.81	Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.06	Jun	5.93	Jun	5.41	Jun	4.69	Jun	2.70
Jul	10.24	Jul	13.21	Jul	9.14	Jul	7.60	Jul	7.03	Jul	5.85	Jul	5.22	Jul	4.57	Jul	2.59
Aug	11.00	Aug	12.54	Aug	9.32	Aug	7.39	Aug	6.84	Aug	5.72	Aug	5.06	Aug	4.50	Aug	2.77
Sep	11.34	Sep	12.29	Sep	9.06	Sep	7.34	Sep	7.03	Sep	5.83	Sep	4.90	Sep	4.27	Sep	2.88
Oct	11.59	Oct	11.98	Oct	8.89	Oct	7.53	Oct	6.81	Oct	5.80	Oct	4.86	Oct	4.17	Oct	2.90
Nov	12.37	Nov	11.56	Nov	9.02	Nov	7.61	Nov	6.48	Nov	5.78	Nov	4.89	Nov	4.00	Nov	2.80
Dec	12.40	Dec	11.52	Dec	9.01	Dec	7.44	Dec	6.55	Dec	5.49	Dec	4.86	Dec	2.87	Dec	2.88
Jan 1981	12.14	Jan 1985	11.45	Jan 1989	8.93	Jan 1993	7.34	Jan 1997	6.83	Jan 2001	5.54	Jan 2005	4.73	Jan 2009	3.13	Jan 2013	3.08
Feb	12.80	Feb	11.47	Feb	9.01	Feb	7.09	Feb	6.69	Feb	5.45	Feb	4.55	Feb	3.59	Feb	3.17
Mar	12.69	Mar	11.81	Mar	9.17	Mar	6.82	Mar	6.93	Mar	5.34	Mar	4.78	Mar	3.64	Mar	3.16
Apr	13.20	Apr	11.47	Apr	9.03	Apr	6.85	Apr	7.09	Apr	5.65	Apr	4.65	Apr	3.76	Apr	2.93
May	13.60	May	11.05	May	8.83	May	6.92	May	6.94	May	5.78	May	4.49	May	4.23	May	3.11
Jun	12.96	Jun	10.44	Jun	8.27	Jun	6.81	Jun	6.77	Jun	5.67	Jun	4.29	Jun	4.52	Jun	3.40
Jul	13.59	Jul	10.50	Jul	8.08	Jul	6.63	Jul	6.51	Jul	5.61	Jul	4.41	July	4.41	Jul	3.61
Aug	14.17	Aug	10.56	Aug	8.12	Aug	6.32	Aug	6.58	Aug	5.48	Aug	4.46	Aug	4.37	Aug	3.76
Sep	14.67	Sep	10.61	Sep	8.15	Sep	6.00	Sep	6.50	Sep	5.48	Sep	4.47	Sep	4.19	Sep	3.79
Oct	14.68	Oct	10.50	Oct	8.00	Oct	5.94	Oct	6.33	Oct	5.32	Oct	4.67	Oct	4.19	Oct	3.68
Nov	13.35	Nov	10.06	Nov	7.90	Nov	6.21	Nov	6.11	Nov	5.12	Nov	4.73	Nov	4.31	Nov	3.80
Dec	13.45	Dec	9.54	Dec	7.90	Dec	6.25	Dec	5.99	Dec	5.48	Dec	4.66	Dec	4.49	Dec	3.89
Jan 1982	14.22	Jan 1986	9.40	Jan 1990	8.26	Jan 1994	6.29	Jan 1998	5.81	Jan 2002	5.44	Jan 2006	4.59	Jan 2010	4.60	Jan 2014	3.77
Feb	14.22	Feb	8.93	Feb	8.50	Feb	6.49	Feb	5.89	Feb	5.39	Feb	4.58	Feb	4.62	Feb	3.66
Mar	13.53	Mar	7.96	Mar	8.56	Mar	6.91	Mar	5.95	Mar	5.71	Mar	4.73	Mar	4.64	Mar	3.62
Apr	13.37	Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92	Apr	5.67	Apr	5.06	Apr	4.69	Apr	3.52
May	13.24	May	7.52	May	8.73	May	7.41	May	5.93	May	5.64	May	5.20	May	4.29	May	3.39
Jun	13.92	Jun	7.57	Jun	8.46	Jun	7.40	Jun	5.70	Jun	5.52	Jun	5.16	Jun	4.13	Jun	3.42
Jul	13.55	Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.68	Jul	5.38	July	5.13	July	3.99	Jul	3.33
Aug	12.77	Aug	7.33	Aug	8.86	Aug	7.49	Aug	5.54	Aug	5.08	Aug	5.00	Aug	3.80	Aug	3.20
Sep	12.07	Sep	7.62	Sep	9.03	Sep	7.71	Sep	5.20	Sep	4.76	Sep	4.85	Sep	3.77	Sep	3.26
Oct	11.17	Oct	7.70	Oct	8.86	Oct	7.94	Oct	5.01	Oct	4.93	Oct	4.85	Oct	3.87	Oct	3.04
Nov	10.54	Nov	7.52	Nov	8.54	Nov	8.08	Nov	5.25	Nov	4.95	Nov	4.69	Nov	4.19	Nov	3.04
Dec	10.54	Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.06	Dec	4.92	Dec	4.68	Dec	4.42	Dec	2.83
Jan 1983	10.63	Jan 1987	7.39	Jan 1991	8.27	Jan 1995	7.85	Jan 1999	5.16	Jan 2003	4.94	Jan 2007	4.85	Jan 2011	4.52		
Feb	10.88	Feb	7.54	Feb	8.03	Feb	7.61	Feb	5.37	Feb	4.81	Feb	4.82	Feb	4.65		
Mar	10.63	Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58	Mar	4.80	Mar	4.72	Mar	4.51		
Apr	10.48	Apr	8.25	Apr	8.21	Apr	7.36	Apr	5.55	Apr	4.90	Apr	4.86	Apr	4.50		
May	10.53	May	8.78	May	8.27	May	6.95	May	5.81	May	4.53	May	4.90	May	4.29		
Jun	10.93	Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04	Jun	4.37	Jun	5.20	Jun	4.23		
Jul	11.40	Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98	Jul	4.93	July	5.11	Jul	4.27		
Aug	11.82	Aug	8.97	Aug	8.14	Aug	6.86	Aug	6.07	Aug	5.30	Aug	4.93	Aug	3.65		
Sep	11.63	Sep	9.59	Sep	7.95	Sep	6.55	Sep	6.07	Sep	5.14	Sep	4.79	Sep	3.18		
Oct	11.58	Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26	Oct	5.16	Oct	4.77	Oct	3.13		
Nov	11.75	Nov	8.95	Nov	7.92	Nov	6.26	Nov	6.15	Nov	5.13	Nov	4.52	Nov	3.02		
Dec	11.88	Dec	9.12	Dec	7.70	Dec	6.06	Dec	6.35	Dec	5.08	Dec	4.53	Dec	2.98		

Sources: http://finance.yahoo.com/q/hp?s=^TYX http://research.stlouisfed.org/fred2/data/GS30.txt





Monthly Spreads Between Yields on Public Utility Bonds and Thirty-Year U.S. Treasury Bonds (1980 - 2014)







Historical Consolidated Capital Structures for The Empire District Electric Company

Capital Components	2009	2010	2011	2012	2013	5-Year Average
Common Equity	\$600,150,000.0	\$657,624,000.0	\$693,989,000.0	\$717,798,000.0	\$750,123,000.0	\$683,936,800.0
Preferred Stock	0.0	0.0	0.0	0.0	0.0	\$0.0
Long-Term Debt	640,156,000.0 *	693,072,000.0 *	692,259,000.0 *	691,626,714.0 *	743,428,274.0 *	\$692,108,397.6
Short-Term Debt	50,500,000.0	24,000,000.0	12,000,000.0	24,000,000.0	4,000,000.0	\$22,900,000.0
Total	\$1,290,806,000.0	\$1,374,696,000.0	\$1,398,248,000.0	\$1,433,424,714.0	\$1,497,551,274.0	\$1,398,945,197.6

Capital Components	ital Components 2009		2011	2012	2013	5-Year Average
Common Equity	46.49%	47.84%	49.63%	50.08%	50.09%	48.83%
Preferred Stock	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Long-Term Debt	49.59%	50.42%	49.51%	48.25%	49.64%	49.48%
Short-Term Debt	3.91%	1.75%	0.86%	1.67%	0.27%	1.69%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: Empire District Electric Company's 2009, 2010,2011, 2012 and 2013 Annual Reports.

Note: * The amount of long-term debt includes current maturities and capital leases.

Embedded Cost of Long-Term Debt as of August 31, 2014 For The Empire District Electric Company

	Amount Outstanding	Annual Cost
Bonds and Unsecured Notes Series:		
7.2% Series, Due 2016	\$25,000,000	\$1,800,000
6.375% Series due 2018	\$90,000,000	\$5,737,500
5.2% Series, due in 2040	\$50,000,000	\$2,600,000
6.7% Sr. Notes, Series, Due 2033	\$62,000,000	\$4,154,000
5.8% Sr. Notes, Series, Due 7/1/2035	\$40,000,000	\$2,320,000
4.65% Series, Due 6/1/2020	\$100,000,000	\$4,650,000
5.875%, Due 2037	\$80,000,000	\$4,700,000
6.82% Series, Due 6/1/2036-EDG	\$55,000,000	\$3,751,000
3.58% Series, due 4-2-2027	\$88,000,000	\$3,150,400
3.73% Series, Due 5/30/2033	\$30,000,000	\$1,119,000
4.32% Series, Due 5/30/2043	\$120,000,000	\$5,184,000
Premium, Discount and Expense	-\$15,909,798 ¹	\$1,113,621 ¹
Total	\$724,090,202	\$40,279,521

Embedded Cost of Long-term Debt

5.56%

Source: Response to DR No. 0079

¹ Adjustment made for disallowance associated with Empire's debt expenses incurred to amend its mortgage bond indenture in order to provide additional flexibility to pay its dividend.

Capital Structure as of August 31, 2014 for The Empire District Electric Company

Dollar Amount (000's)	Percentage of Capital
\$ 775,357,807	51.71%
\$ -	0.00%
\$ 724,090,202	48.29%
\$-	0.00%
\$ 1,499,448,009	100.00%
	Amount (000's) \$ 775,357,807 \$ - \$ 724,090,202 \$ -

Source: Response to Staff DR No. 0079.

Criteria for Selecting Comparable Electric Utility Companies

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
				At least					L- T Growth Coverage from		
				50% of	At least	At Least 80% of		Investment	at least 2 equity	No	Comparable
ONT F 1		Stock	Regulated	Plant from	25% of	Income	No Reduced	Grade Credit	analysts in last	Announced	Company
SNL Financial Power Companies	Ticker	Publicly Traded	Utility (EEI)	Electric Utility	Electric Plant Generation	from Regulated	Dividend Since 2011	Rating	90 days and Current L-T Growth Available	Merger or	Met All Criteria
AES Corporation	AES	Yes	(EEI) NA	Utility	Generation	Utility Operations	Since 2011	(2 of 3 agencies)	L-1 Growin Available	Acquisition	Criteria
ALLETE, Inc.	ALS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
Alliant Energy Corporation	LNT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ameren Corporation	AEE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
American Electric Power Company	AEP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Atlantic Power Corporation	ATP	Yes	NA								
Avista Corporation	AVA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
Black Hills Corporation	BKH	Yes	Yes	No							
Calpine Corporation	CPN	Yes	NA								
CenterPoint Energy, Inc.	CNP	Yes	No								
Chesapeake Utilities Corporation	CPK	Yes	NA								
Cleco Corporation	CNL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
CMS Energy Corporation	CMS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Consolidated Edison, Inc.	ED CVA	Yes	Yes	Yes	No						
Covanta Holding Corporation Dominion Resources, Inc.	D	Yes	NA No								
Dominion Resources, Inc. DTE Energy Company	DTE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Duke Energy Corporation	DUK	Yes	Yes	Yes	Yes	No	100	100	100	100	103
Dynegy Inc.	DYN	Yes	NA	103	100	110					
Edison International	EIX	Yes	Yes	Yes	No						
El Paso Electric Company	EE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
Empire District Electric Company	EDE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
Entergy Corporation	ETR	Yes	Yes	Yes	Yes	No					
Exelon Corporation	EXC	Yes	No								
FirstEnergy Corp.	FE	Yes	No								
Great Plains Energy Inc.	GXP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hawaiian Electric Industries, Inc.	HE	Yes	No								
IDACORP, Inc.	IDA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No		
Integrys Energy Group, Inc.	TEG ITC	Yes	Yes	No							
ITC Holdings Corp. MDU Resources Group, Inc.	MDU	Yes Yes	NA No								
MGE Energy, Inc.	MGEE	Yes	No								
NextEra Energy Partners, LP	NEP	Yes	NA								
NextEra Energy, Inc.	NEE	Yes	No								
NiSource Inc.	NI	Yes	No								
Northeast Utilities	NU	Yes	Yes	Yes	No						
NorthWestern Corporation	NWE	Yes	Yes	Yes	No						
NRG Energy, Inc.	NRG	Yes	NA								
NRG Yield, Inc.	NYLD	Yes	NA								
OGE Energy Corp.	OGE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Ormat Technologies, Inc.	ORA	Yes	NA								
Otter Tail Corporation	OTTR	Yes	Yes	Yes	Yes	No					
Pattern Energy Group Inc.	PEGI	Yes	NA	v	N						
Pepco Holdings, Inc.	POM	Yes	Yes	Yes	No						
PG&E Corporation	PCG PNW	Yes Yes	Yes Yes	Yes Yes	No Yes	Yes	Yes	V	Yes	Yes	V
Pinnacle West Capital Corporation PNM Resources, Inc.	PNW PNM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes Yes
PNM Resources, Inc. Portland General Electric Compar	PNM POR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PPL Corporation	PPL	Yes	No	1 65	103	103	103	105	103	1 60	105
Public Service Enterprise Group Incc	PEG	Yes	No								
SCANA Corporation	SCG	Yes	No								
Sempra Energy	SRE	Yes	No								
Southern Company	SO	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spark Energy, Inc.	SPKE	Yes	NA								
TECO Energy, Inc.	TE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TerraForm Power, Inc.	TERP	Yes	NA								
UGI Corporation	UGI	Yes	NA								
UIL Holdings Corporation	UIL	Yes	Yes	Yes	No						
Unitil Corporation	UTL	Yes	Yes	No							
UNS Energy Corporation	NA	No	N								
Vectren Corporation	VVC WR	Yes	No	¥7	V	V.	V	¥7	V	Van	\$7
Westar Energy, Inc. Wisconsin Energy Corporation	WEC	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes No	Yes	Yes	Yes	Yes	Yes
Xcel Energy Inc.	XEL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sources: Columns 1, 2, 3, 4, 5, 6, 7, 8			1 03	105	103	103	105	105	105	100	105

Sources: Columns 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11 = SNL Financial. Column 4 = Edison Electric Institute 2013 Financial Review

NA = Not available.

Comparable Electrical Utility Companies for The Empire District Electric Company

S&P

				Corporate
	Ticker			Credit
Number	Symbol	Company Name		Rating
1	LNT	Alliant Energy		A-
2	AEE	Ameren Corp.		BBB+
3	AEP	American Electric Power		BBB
4	CMS	CMS Energy Corporation		BBB+
5	DTE	DTE Energy Company		BBB+
6	GXP	Great Plains Energy		BBB+
7	OGE	OGE Energy Corp.		A-
8	PNW	Pinnacle West Capital		A-
9	PNM	PNM Resources, Inc.		BBB
10	POR	Portland General Electric Company		BBB
11	SO	Southern Company		А
12	TE	TECO Energy, Inc.		BBB+
13	WR	Westar Energy, Inc.		BBB+
14	XEL	Xcel Energy		A-
			Average	BBB+
		The Empire Distrtict Electric Company		BBB

Dividends Per Share for the Fourteen Comparable Companies

Company Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Alliant Energy	2.35	2.20	2.04	1.88	1.80	1.70	1.58	1.50	1.40	0.95	1.47	1.05	1.01	1.00	2.00	2.00
Ameren Corp.	1.74	1.67	1.62	1.60	1.60	1.56	1.54	1.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54
American Electric Power	2.23	2.13	2.03	1.95	1.88	1.85	1.71	1.64	1.64	1.58	1.50	1.42	1.40	1.65	2.40	2.40
CMS Energy Corp.	1.23	1.15	1.08	1.02	0.96	0.84	0.66	0.50	0.36	0.20	0.00	0.00	0.00	0.00	1.09	1.46
DTE Energy Company	2.98	2.83	2.70	2.59	2.42	2.32	2.18	2.12	2.12	2.12	2.08	2.06	2.06	2.06	2.06	2.06
Great Plains Energy	1.09	1.00	0.94	0.88	0.86	0.84	0.83	0.83	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.70
OGE Energy Corp.	1.12	1.04	0.93	0.85	0.80	0.76	0.73	0.71	0.70	0.68	0.67	0.67	0.67	0.67	0.67	0.67
Pinnacle West Capital	2.53	2.42	2.32	2.23	2.67	2.10	2.10	2.10	2.10	2.10	2.03	1.93	1.83	1.73	1.63	1.53
PNM Resources, Inc.	0.91	0.80	0.74	0.68	0.58	0.50	0.50	0.50	0.61	0.92	0.88	0.79	0.67	0.61	0.59	0.53
Portland General Electric Company	1.30	1.19	1.12	1.10	1.08	1.06	1.04	1.01	0.97	0.93	0.68 N	A N	IA N	IA N	JA N	NA
Southern Company	2.22	2.15	2.08	2.01	1.94	1.87	1.80	1.73	1.66	1.60	1.54	1.48	1.42	1.39	1.36	1.34
TECO Energy, Inc.	0.91	0.90	0.89	0.88	0.88	0.85	0.82	0.80	0.80	0.78	0.76	0.76	0.76	0.93	1.41	1.37
Westar Energy, Inc.	1.55	1.45	1.40	1.36	1.32	1.28	1.24	1.20	1.16	1.08	1.00	0.92	0.80	0.76	1.20	1.20
Xcel Energy	1.31	1.25	1.19	1.11	1.07	1.03	1.00	0.97	0.94	0.91	0.88	0.85	0.81	0.75	1.13	1.50

	10-Year Historical	5-Year Historcal	3-Year Projected
Alliant Energy	0.74%	7.09%	7.71%
Ameren Corp.	-4.61%	-9.00%	2.93%
American Electric Power	-1.26%	3.77%	4.65%
CMS Energy Corp.	1.01%	38.17%	6.36%
DTE Energy Company	1.71%	3.00%	4.91%
Great Plains Energy	-6.46%	-12.38%	7.23%
OGE Energy Corp.	1.90%	3.25%	9.51%
Pinnacle West Capital	3.67%	2.35%	4.37%
PNM Resources, Inc.	0.15%	-6.05%	10.10%
Portland General Electric Company	NA	4.60%	5.98%
Southern Company	3.63%	3.99%	3.40%
TECO Energy, Inc.	-3.44%	2.30%	1.12%
Westar Energy, Inc.	2.28%	4.10%	4.38%
Xcel Energy	-0.49%	3.25%	5.65%
Average	-0.09%	3.46%	5.59%
Average without OGE and TECO	0.03%	3.57%	5.64%

Earnings Per Share for the Fourteen Comparable Companies

Company Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Alliant Energy	3.84	3.64	3.47	3.29	2.93	2.92	2.62	1.00	2.54	3.78	2.90	0.48	1.93	1.54	0.97	1.57
Ameren Corp.	2.71	2.56	2.36	2.11	2.13	1.79	0.58	2.78	2.88	2.98	2.66	3.13	2.84	3.14	2.61	3.46
American Electric Power	3.72	3.54	3.47	3.04	2.60	3.25	2.53	2.97	3.40	2.87	2.52	2.64	2.85	1.35	1.46	2.85
CMS Energy Corp.	2.00	1.88	1.77	1.71	1.43	1.65	1.50	0.87	1.25	-0.62	-0.66	-0.71	0.68	-0.30	-2.84	-1.79
DTE Energy Company	4.91	4.60	4.44	3.76	3.89	4.21	3.75	3.24	3.22	4.62	2.19	3.30	2.67	2.87	3.57	2.15
Great Plains Energy	1.84	1.68	1.58	1.62	1.36	1.27	1.55	1.16	1.16	1.41	1.74	2.18	2.39	2.72	2.10	-0.68
OGE Energy Corp.	2.26	2.10	1.97	1.96	1.80	1.75	1.52	1.34	1.25	1.33	1.24	0.90	0.84	0.83	0.52	0.60
Pinnacle West Capital	4.01	3.86	3.72	3.69	3.54	3.01	3.05	2.34	2.59	2.83	2.67 N	A	2.70	2.47	2.79	3.86
PNM Resources, Inc.	1.84	1.57	1.47	1.26	1.32	1.98	-0.49	0.58	-3.66	0.77	1.55	1.00	1.45	0.99	1.09	2.55
Portland General Electric Company	2.39	2.28	2.17	1.36	1.87	1.95	1.66	1.31	1.39	2.33	1.14 N	A N	A N	IA N	IA N	ΝA
Southern Company	2.98	2.87	2.80	1.88	2.70	2.57	2.37	2.07	2.26	2.29	2.12	2.14	2.07	2.03	1.86	1.62
TECO Energy, Inc.	1.17	1.11	1.03	0.92	1.14	1.17	1.12	1.00	0.77	1.90	1.18	1.02	-1.85	0.56	1.81	2.04
Westar Energy, Inc.	2.54	2.42	2.41	2.29	2.15	1.95	1.81	1.28	1.69	1.83	1.88	1.54	1.19	2.24	1.23	-0.56
Xcel Energy	2.21	2.09	2.00	1.91	1.86	1.72	1.62	1.49	1.47	1.38	1.39	1.23	1.30	1.31	1.37	2.14

	10-Year Historical	5-Year Historcal	3-Year Projected
Alliant Energy	8.40%	-0.17%	5.31%
Ameren Corp.	-4.15%	-6.68%	8.65%
American Electric Power	4.62%	0.23%	6.97%
CMS Energy Corp.	NM	NM	5.41%
DTE Energy Company	3.28%	3.41%	9.32%
Great Plains Energy	0.26%	-0.28%	4.42%
OGE Energy Corp.	10.95%	7.60%	4.85%
Pinnacle West Capital	1.17%	4.83%	2.81%
PNM Resources, Inc.	-0.15%	NM	13.48%
Portland General Electric Company	NA	1.28%	20.65%
Southern Company	2.64%	1.40%	16.57%
TECO Energy, Inc.	-3.07%	-3.45%	8.49%
Westar Energy, Inc.	8.18%	3.42%	3.45%
Xcel Energy	1.31%	5.30%	5.06%
Average	2.79%	1.41%	8.25%
Average without OGE and TECO	2.56%	1.27%	8.51%

Book Value Per Share for the Fourteen Comparable Companies

Company Name	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Alliant Energy	35.77	34.03	31.77	29.58	28.25	27.14	26.09	25.06	25.56	24.30	22.83	20.85	22.13	21.37	19.89	21.39
Ameren Corp.	29.42	28.67	27.59	26.97	27.27	32.64	32.15	33.09	32.80	32.41	31.86	31.09	29.71	26.73	24.93	24.26
American Electric Power	38.10	36.45	34.80	32.98	31.37	30.33	28.33	27.49	26.33	25.17	23.73	23.08	21.51	19.93	20.85	25.54
CMS Energy Corp.	15.23	14.37	13.56	12.98	12.10	11.92	11.19	11.42	10.94	9.46	10.03	10.53	10.63	9.84	7.48	15.32
DTE Energy Company	51.29	49.16	46.91	44.73	42.78	41.41	39.67	37.96	36.77	35.86	33.02	32.44	31.85	31.36	27.26	28.48
Great Plains Energy	24.62	23.87	23.21	22.58	21.75	21.74	21.26	20.62	21.39	18.18	16.70	16.51	15.35	13.82	13.58	12.59
OGE Energy Corp.	17.69	16.88	16.08	15.30	14.01	13.06	11.73	10.52	10.14	9.16	8.79	7.59	7.14	6.87	6.27	6.67
Pinnacle West Capital	43.50	41.29	39.79	38.07	36.20	34.98	33.86	32.69	34.16	35.15	34.48	34.58	32.14	30.97	29.40	29.46
PNM Resources, Inc.	22.13	21.23	20.54	21.01	20.19	19.76	17.73	19.03	19.03	22.03	22.24	18.89	18.19	17.84	16.60	17.25
Portland General Electric Company	26.97	26.23	24.05	23.29	22.87	22.07	21.14	20.50	21.64	21.05	19.58	19.15	29.91	27.69	26.40	25.49
Southern Company	24.69	23.81	23.04	21.43	21.09	20.34	19.21	18.15	17.08	16.23	15.24	14.42	13.86	13.13	12.16	11.43
TECO Energy, Inc.	11.68	11.43	11.27	10.74	10.58	10.50	10.10	9.75	9.43	9.56	8.25	7.64	6.43	8.93	14.85	14.12
Westar Energy, Inc.	27.68	26.92	25.34	23.88	22.89	22.03	21.25	20.59	20.18	19.14	17.61	16.31	16.13	13.98	13.41	25.60
Xcel Energy	22.19	21.22	20.33	19.21	18.19	17.44	16.76	15.92	15.35	14.70	14.28	13.37	12.99	12.95	11.70	17.95

	<u> 10-Year Historical</u>	5-Year Historcal	3-Year Projected
Alliant Energy	3.54%	3.17%	6.54%
Ameren Corp.	0.64%	-2.19%	2.94%
American Electric Power	4.08%	4.71%	4.94%
CMS Energy Corp.	1.78%	3.99%	5.48%
DTE Energy Company	4.42%	4.06%	4.67%
Great Plains Energy	5.41%	3.27%	2.92%
OGE Energy Corp.	8.77%	8.57%	4.95%
Pinnacle West Capital	2.43%	1.03%	4.54%
PNM Resources, Inc.	2.00%	-0.75%	1.74%
Portland General Electric Company	-1.29%	1.85%	5.01%
Southern Company	5.76%	5.30%	4.83%
TECO Energy, Inc.	-1.61%	3.15%	2.84%
Westar Energy, Inc.	3.06%	3.86%	5.04%
Xcel Energy	3.07%	4.35%	4.93%
Average	3.00%	3.17%	4.38%
Average without OGE and TECO	2.91%	2.72%	4.47%

Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Fourteen Comparable Companies

		10-Year Annual Compound Growth Rates					
		-		Average of			
				10 Year			
				Annual			
				Compound			
Company Name	DPS	EPS	BVPS	Growth Rates			
Alliant Energy	0.74%	8.40%	3.54%	4.23%			
Ameren Corp.	-4.61%	-4.15%	0.64%	-2.70%			
American Electric Power	-1.26%	4.62%	4.08%	2.48%			
CMS Energy Corp.	1.01%	NM	1.78%	1.39%			
DTE Energy Company	1.71%	3.28%	4.42%	3.14%			
Great Plains Energy	-6.46%	0.26%	5.41%	-0.26%			
OGE Energy Corp.	1.90%	10.95%	8.77%	7.20%			
Pinnacle West Capital	3.67%	1.17%	2.43%	2.42%			
PNM Resources, Inc.	0.15%	-0.15%	2.00%	0.67%			
Portland General Electric Company	NA	NA	-1.29%	-1.29%			
Southern Company	3.63%	2.64%	5.76%	4.01%			
TECO Energy, Inc.	-3.44%	-3.07%	-1.61%	-2.71%			
Westar Energy, Inc.	2.28%	8.18%	3.06%	4.51%			
Xcel Energy	-0.49%	1.31%	3.07%	1.29%			
Average	-0.09%	2.79%	3.00%	1.74%			
Average without OGE and TECO	0.03%	2.56%	2.91%	1.66%			

Source: SNL Financial.

Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Fourteen Comparable Companies

		5-Year Annual Compou	und Growth Rates	
		_		Average of
				5 Year
				Annual
				Compound
Company Name	DPS	EPS	BVPS	Growth Rates
Alliant Energy	7.09%	-0.17%	3.17%	3.36%
Ameren Corp.	-9.00%	-6.68%	-2.19%	-5.96%
American Electric Power	3.77%	0.23%	4.71%	2.90%
CMS Energy Corp.	38.17%	NM	3.99%	21.08%
DTE Energy Company	3.00%	3.41%	4.06%	3.49%
Great Plains Energy	-12.38%	-0.28%	3.27%	-3.13%
OGE Energy Corp.	3.25%	7.60%	8.57%	6.48%
Pinnacle West Capital	2.35%	4.83%	1.03%	2.74%
PNM Resources, Inc.	-6.05%	NM	-0.75%	-3.40%
Portland General Electric Company	4.60%	1.28%	1.85%	2.58%
Southern Company	3.99%	1.40%	5.30%	3.56%
TECO Energy, Inc.	2.30%	-3.45%	3.15%	0.67%
Westar Energy, Inc.	4.10%	3.42%	3.86%	3.79%
Xcel Energy	3.25%	5.30%	4.35%	4.30%
Average	3.46%	1.41%	3.17%	3.03%
Average without OGE and TECO	3.57%	1.27%	2.72%	2.94%

Source: SNL Financial.

Historical and Projected Growth Rates for the Fourteen Comparable Electric Companies

	(1)	(2)	(3)
	10-Year	5-Year	Projected
	Historical	Hisotrical	5-Year
	Growth Rate	Growth Rate	EPS Growth
	(DPS, EPS and	(DPS, EPS and	FactSet
Company Name	BVPS)	BVPS)	(Mean) (%)
Alliant Energy	4.23%	3.36%	4.90
Ameren Corp.	-2.70%	-5.96%	8.43
American Electric Power	2.48%	2.90%	5.18
CMS Energy Corp.	NM	NM	5.98
DTE Energy Company	3.14%	3.49%	5.95
Great Plains Energy	-0.26%	-3.13%	4.62
OGE Energy Corp.	7.20%	6.48%	5.87
Pinnacle West Capital	2.42%	2.74%	4.00
PNM Resources, Inc.	0.67%	NM	7.43
Portland General Electric Company	-1.29%	2.58%	7.74
Southern Company	4.01%	3.56%	3.71
TECO Energy, Inc.	-2.71%	0.67%	6.65
Westar Energy, Inc.	4.51%	3.79%	3.38
Xcel Energy	1.29%	4.30%	4.97
Average	1.77%	2.06%	5.63
Average without OGE and TECO	1.68%	1.76%	5.52

Sources: Column 1 = Schedule 9-4

Column 2 = Schedule 9-5.

Column 3 =SNL Financial

Average High / Low Stock Price for October 2014 through December 2014 for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Octobe	er 2014	Novemb	per 2014	Decemb	er 2014	Average High/Low
	High	Low	High	Low	High	Low	Stock
	Stock	Stock	Stock	Stock	Stock	Stock	Price
Company Name	Price	Price	Price	Price	Price	Price	(10/14 - 12/14)
Alliant Energy	62.30	55.38	63.73	61.35	69.78	61.94	62.41
Ameren Corp.	42.71	38.25	44.22	41.89	48.14	42.15	42.89
American Electric Power	58.61	51.97	59.84	55.90	63.22	56.97	57.75
CMS Energy Corp.	32.91	29.59	33.46	32.05	36.87	32.79	32.95
DTE Energy Company	82.33	75.76	84.42	79.54	90.77	80.71	82.26
Great Plains Energy	27.00	24.11	27.38	25.63	29.46	25.94	26.59
OGE Energy Corp.	37.56	33.06	37.90	35.64	36.70	32.85	35.62
Pinnacle West Capital	61.56	54.59	63.50	60.61	71.11	62.60	62.33
PNM Resources, Inc.	29.33	24.81	29.62	28.19	31.60	27.41	28.49
Portland General Electric Company	36.86	32.07	37.29	35.50	40.31	36.51	36.42
Southern Company	47.69	43.55	47.97	46.30	51.28	47.07	47.31
TECO Energy, Inc.	19.87	17.35	20.17	19.12	21.29	18.89	19.45
Westar Energy, Inc.	37.91	33.73	39.62	37.24	43.15	38.52	38.36
Xcel Energy	33.76	30.18	34.10	32.95	37.58	33.49	33.68

Notes:

Column 7 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6) / 6].

Source: http://finance.yahoo.com

Constant-Growth Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)						
		Average							
	Expected	High/Low	Projected						
	Annual	Stock	Dividend						
Company Name	Dividend	Price	Yield						
Alliant Energy	\$2.20	\$62.413	3.53%	-					
Ameren Corp.	\$1.67	\$42.893	3.89%						
American Electric Power	\$2.13	\$57.752	3.69%						
CMS Energy Corp.	\$1.15	\$32.945	3.49%						
DTE Energy Company	\$2.83	\$82.255	3.44%						
Great Plains Energy	\$1.00	\$26.587	3.77%						
OGE Energy Corp.	\$1.04	\$35.618	2.91%						
Pinnacle West Capital	\$2.42	\$62.328	3.89%						
PNM Resources, Inc.	\$0.80	\$28.493	2.82%						
Portland General Electric Company	\$1.19	\$36.423	3.28%						
Southern Company	\$2.15	\$47.310	4.55%						
TECO Energy, Inc.	\$0.90	\$19.448	4.62%						
Westar Energy, Inc.	\$1.45	\$38.362	3.79%						
Xcel Energy	\$1.25	\$33.677	3.72%						
Average			3.67%	_					
Average without OGE and TECC)		3.65%						
	Proposed Divi	dend Yield:		3.70%					
	ge of Growth:		3.50% - 4.50%						
Estimated Proxy Cost of Common Equity: 7.20 - 8.20%									
Notes: Column 1 = Expected Annual Dividend based on each company's 2015 fiscal year FactSet projected dividends per share according to SNL Financial.									

Column 3 = (Column 1 / Column 2).

Sources: Column 1 = SNL Financial

Column 2 = Schedule 11.

Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.58%	4.27%	3.95%	3.63%	3.32%	3.00%	6.80%
Ameren Corp.	\$1.64	8.43%	7.53%	6.62%	5.72%	4.81%	3.91%	3.00%	8.48%
American Electric Power	\$2.12	5.18%	4.82%	4.45%	4.09%	3.73%	3.36%	3.00%	7.34%
CMS Energy Corp.	\$1.08	5.98%	5.48%	4.99%	4.49%	3.99%	3.50%	3.00%	7.08%
DTE Energy Company	\$2.76	5.95%	5.46%	4.97%	4.48%	3.98%	3.49%	3.00%	7.17%
Great Plains Energy	\$0.98	4.62%	4.35%	4.08%	3.81%	3.54%	3.27%	3.00%	7.21%
OGE Energy Corp.	\$1.00	5.87%	5.39%	4.91%	4.44%	3.96%	3.48%	3.00%	6.48%
Pinnacle West Capital	\$2.38	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	7.19%
PNM Resources, Inc.	\$0.80	7.43%	6.69%	5.95%	5.22%	4.48%	3.74%	3.00%	6.84%
Portland General Electric	\$1.12	7.74%	6.95%	6.16%	5.37%	4.58%	3.79%	3.00%	7.27%
Southern Company	\$2.10	3.71%	3.59%	3.47%	3.36%	3.24%	3.12%	3.00%	7.78%
TECO Energy, Inc.	\$0.88	6.65%	6.04%	5.43%	4.83%	4.22%	3.61%	3.00%	8.81%
Westar Energy, Inc.	\$1.40	3.38%	3.32%	3.25%	3.19%	3.13%	3.06%	3.00%	6.85%
Xcel Energy	\$1.20	4.97%	4.64%	4.31%	3.99%	3.66%	3.33%	3.00%	7.16%
								Average	7.32%
					Avera	age witho	ut OGE a	and TECO	7.26%

Average of Broad Group without Ameren and PNM for Backdating Comparision7.26%Average of Refined Group without Ameren and PNM for Backdating Comparision7.18%

Sources: Column 1 = SNL Financial

Column 2 = Schedule 10-6

Column 8 = See range of averages from Schedules 14-1 through Schedule 14-4.

Appendix 2

Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.67%	4.43%	4.20%	3.97%	3.73%	3.50%	7.20%
Ameren Corp.	\$1.64	8.43%	7.61%	6.79%	5.97%	5.14%	4.32%	3.50%	8.84%
American Electric Power	\$2.12	5.18%	4.90%	4.62%	4.34%	4.06%	3.78%	3.50%	7.72%
CMS Energy Corp.	\$1.08	5.98%	5.57%	5.15%	4.74%	4.33%	3.91%	3.50%	7.47%
DTE Energy Company	\$2.76	5.95%	5.54%	5.13%	4.73%	4.32%	3.91%	3.50%	7.56%
Great Plains Energy	\$0.98	4.62%	4.43%	4.25%	4.06%	3.87%	3.69%	3.50%	7.59%
OGE Energy Corp.	\$1.00	5.87%	5.48%	5.08%	4.69%	4.29%	3.90%	3.50%	6.88%
Pinnacle West Capital	\$2.38	4.00%	3.92%	3.83%	3.75%	3.67%	3.58%	3.50%	7.58%
PNM Resources, Inc.	\$0.80	7.43%	6.78%	6.12%	5.47%	4.81%	4.16%	3.50%	7.23%
Portland General Electric	\$1.12	7.74%	7.03%	6.33%	5.62%	4.91%	4.21%	3.50%	7.66%
Southern Company	\$2.10	3.71%	3.68%	3.64%	3.61%	3.57%	3.54%	3.50%	8.15%
TECO Energy, Inc.	\$0.88	6.65%	6.13%	5.60%	5.08%	4.55%	4.03%	3.50%	9.17%
Westar Energy, Inc.	\$1.40	3.38%	3.40%	3.42%	3.44%	3.46%	3.48%	3.50%	7.25%
Xcel Energy	\$1.20	4.97%	4.73%	4.48%	4.24%	3.99%	3.75%	3.50%	7.55%
								Average	7.70%
					Aver	age witho	ut OGE	and TECO	7.65%

Average of Broad Group without Ameren and PNM for Backdating Comparision7.65%Average of Refined Group without Ameren and PNM for Backdating Comparision7.57%

Sources:	Column 1	= SNL	Financial.
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Column 2 = Schedule 10-6

Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.75%	4.60%	4.45%	4.30%	4.15%	4.00%	7.60%
Ameren Corp.	\$1.64	8.43%	7.69%	6.95%	6.22%	5.48%	4.74%	4.00%	9.21%
American Electric Power	\$2.12	5.18%	4.98%	4.79%	4.59%	4.39%	4.20%	4.00%	8.11%
CMS Energy Corp.	\$1.08	5.98%	5.65%	5.32%	4.99%	4.66%	4.33%	4.00%	7.86%
DTE Energy Company	\$2.76	5.95%	5.63%	5.30%	4.98%	4.65%	4.33%	4.00%	7.95%
Great Plains Energy	\$0.98	4.62%	4.52%	4.41%	4.31%	4.21%	4.10%	4.00%	7.99%
OGE Energy Corp.	\$1.00	5.87%	5.56%	5.25%	4.94%	4.62%	4.31%	4.00%	7.29%
Pinnacle West Capital	\$2.38	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.97%
PNM Resources, Inc.	\$0.80	7.43%	6.86%	6.29%	5.72%	5.14%	4.57%	4.00%	7.63%
Portland General Electric	\$1.12	7.74%	7.12%	6.49%	5.87%	5.25%	4.62%	4.00%	8.05%
Southern Company	\$2.10	3.71%	3.76%	3.81%	3.86%	3.90%	3.95%	4.00%	8.53%
TECO Energy, Inc.	\$0.88	6.65%	6.21%	5.77%	5.33%	4.88%	4.44%	4.00%	9.53%
Westar Energy, Inc.	\$1.40	3.38%	3.48%	3.59%	3.69%	3.79%	3.90%	4.00%	7.64%
Xcel Energy	\$1.20	4.97%	4.81%	4.65%	4.49%	4.32%	4.16%	4.00%	7.94%
								Average	8.09%
					Avera	age witho	ut OGE a	and TECO	8.04%

Average of Broad Group without Ameren and PNM for Backdating Comparision8.04%Average of Refined Group without Ameren and PNM for Backdating Comparision7.96%

Sources: Column 1 = SNL Financial.

Column 2 = Schedule 10-6

Column 8 = See range of averages from Schedules 14-1 through Schedule 14-4.

Appendix 2

Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.82%	4.73%	4.65%	4.57%	4.48%	4.40%	7.92%
Ameren Corp.	\$1.64	8.43%	7.76%	7.09%	6.42%	5.74%	5.07%	4.40%	9.50%
American Electric Power	\$2.12	5.18%	5.05%	4.92%	4.79%	4.66%	4.53%	4.40%	8.42%
CMS Energy Corp.	\$1.08	5.98%	5.72%	5.45%	5.19%	4.93%	4.66%	4.40%	8.18%
DTE Energy Company	\$2.76	5.95%	5.69%	5.43%	5.18%	4.92%	4.66%	4.40%	8.26%
Great Plains Energy	\$0.98	4.62%	4.58%	4.55%	4.51%	4.47%	4.44%	4.40%	8.30%
OGE Energy Corp.	\$1.00	5.87%	5.63%	5.38%	5.14%	4.89%	4.65%	4.40%	7.62%
Pinnacle West Capital	\$2.38	4.00%	4.07%	4.13%	4.20%	4.27%	4.33%	4.40%	8.28%
PNM Resources, Inc.	\$0.80	7.43%	6.93%	6.42%	5.92%	5.41%	4.91%	4.40%	7.95%
Portland General Electric	\$1.12	7.74%	7.18%	6.63%	6.07%	5.51%	4.96%	4.40%	8.36%
Southern Company	\$2.10	3.71%	3.83%	3.94%	4.06%	4.17%	4.29%	4.40%	8.84%
TECO Energy, Inc.	\$0.88	6.65%	6.28%	5.90%	5.53%	5.15%	4.78%	4.40%	9.81%
Westar Energy, Inc.	\$1.40	3.38%	3.55%	3.72%	3.89%	4.06%	4.23%	4.40%	7.96%
Xcel Energy	\$1.20	4.97%	4.88%	4.78%	4.69%	4.59%	4.50%	4.40%	8.25%
								Average	8.41%
					Aver	age witho	ut OGE :	and TECO	8.35%

Sources: Column 1 = SNL Financial.

Column 2 = Schedule 10-6

Column 8 = Compounding the expected GDP price deflator of 2% with the long term real GDP growth of 2.35%.

Central Region Electric Utility Proxy Group EPS Ten-Year Compound Growth Rate Averages (1968-1999)

	Dayton	Detroit					Okla. Gas &		WPS Resources/	WI Energy/	
	P & L/	Edison/			Kansas City	Northern States	Electric/ OGE		Wisconsin	WI Electric	
Years	DPL	DTE	Empire	IPALCO	P&L	Power	Energy Corp.	SJL&P	Public Serv.	Power	Average
1968-70 to 1978-80	-1.74%	-0.57%	0.24%	4.13%	1.77%	4.13%	1.16%	1.40%	6.23%	6.32%	2.31%
1969-71 to 1979-81	-0.21%	0.05%	-0.64%	4.30%	2.62%	4.02%	0.48%	1.66%	6.60%	6.79%	2.57%
1970-72 to 1980-82	0.98%	-0.46%	0.41%	3.14%	3.24%	4.48%	1.88%	2.66%	6.41%	7.24%	3.00%
1971-73 to 1981-83	2.72%	0.53%	2.64%	2.87%	4.83%	6.11%	2.90%	4.03%	6.92%	7.77%	4.13%
1972-74 to 1982-84	3.71%	1.48%	5.33%	4.69%	6.44%	7.64%	3.02%	5.65%	7.78%	8.25%	5.40%
1973-75 to 1983-85	4.19%	3.60%	6.21%	5.91%	7.60%	8.08%	2.58%	6.94%	8.54%	9.39%	6.30%
1974-76 to 1984-86	4.19%	4.41%	6.50%	5.86%	5.75%	8.03%	2.81%	7.89%	7.98%	9.60%	6.30%
1975-77 to 1985-87	5.10%	4.69%	5.70%	4.19%	4.26%	7.59%	2.90%	8.10%	6.81%	9.18%	5.85%
1976-78 to 1986-88	5.84%	4.29%	5.68%	5.40%	3.02%	7.24%	3.92%	7.95%	5.98%	8.86%	5.82%
1977-79 to 1987-89	6.16%	3.93%	5.49%	5.09%	4.12%	6.73%	5.22%	8.49%	5.08%	8.96%	5.93%
1978-80 to 1988-90	5.61%	4.41%	5.52%	5.11%	3.09%	6.07%	6.65%	8.20%	4.35%	9.08%	5.81%
1979-81 to 1989-91	3.75%	5.35%	6.06%	4.67%	1.90%	5.45%	6.56%	7.68%	3.70%	8.07%	5.32%
1980-82 to 1990-92	2.46%	6.83%	4.65%	4.43%	0.31%	3.15%	3.63%	5.76%	3.91%	6.16%	4.13%
1981-83 to 1991-93	1.00%	6.06%	2.56%	3.11%	-1.01%	1.58%	1.58%	3.37%	3.45%	4.33%	2.60%
1982-84 to 1992-94	1.31%	4.75%	-0.16%	1.44%	-2.03%	0.83%	0.71%	2.88%	2.19%	2.64%	1.46%
1983-85 to 1993-95	1.36%	2.97%	-1.18%	1.78%	-2.21%	1.85%	1.81%	2.46%	1.03%	2.58%	1.24%
1984-86 to 1994-96	1.71%	1.79%	-1.39%	3.31%	-1.08%	2.26%	2.15%	2.56%	0.20%	2.27%	1.38%
1985-87 to 1995-97	1.65%	0.64%	-1.47%	4.22%	0.35%	1.90%	2.19%	1.90%	0.12%	-0.46%	1.10%
1986-88 to 1996-98	2.28%	0.57%	-0.92%	4.59%	1.57%	1.50%	2.11%	1.34%	-0.86%	-2.24%	0.99%
1987-89 to 1997-99	2.62%	1.08%	-0.46%	5.06%	0.15%	0.40%	2.36%	0.49%	-0.38%	-3.07%	0.83%
Average	2.73%	2.82%	2.54%	4.17%	2.23%	4.45%	2.83%	4.57%	4.30%	5.59%	3.62%

The Empire District Electric Company Case No. ER-2014-0351 Central Region Electric Utility Proxy Group DPS

Ten-Year Compound Growth Rate Averages (1968-1999)

	Dayton P & L/	Detroit Edison/			Kansas City	Northern States	Okla. Gas & Electric/ OGE		WPS Resources/ Wisconsin	WI Energy/ WI Electric	
Years	DPL		Empire	IPALCO	P & L	Power	Energy Corp.	SJL&P	Public Serv.	Power	Average
1968-70 to 1978-80	0.90%	1.17%	2.45%	3.52%	3.34%	3.37%	3.79%	1.89%	4.36%	5.46%	3.03%
1969-71 to 1979-81	0.87%	1.43%	2.17%	4.15%	3.03%	3.76%	3.52%	1.89%	4.69%	5.70%	3.12%
1970-72 to 1980-82	1.04%	1.59%	1.90%	4.69%	3.17%	4.02%	3.32%	2.01%	5.13%	5.98%	3.28%
1971-73 to 1981-83	1.41%	1.64%	1.98%	4.92%	3.56%	4.39%	3.35%	2.28%	5.64%	6.23%	3.54%
1972-74 to 1982-84	1.70%	1.60%	2.32%	4.95%	4.13%	4.88%	3.49%	2.82%	6.18%	6.37%	3.84%
1973-75 to 1983-85	1.89%	1.48%	2.86%	5.03%	4.45%	5.60%	3.62%	3.50%	6.72%	6.52%	4.17%
1974-76 to 1984-86	1.89%	1.48%	3.31%	5.19%	4.12%	6.31%	3.75%	4.32%	7.18%	6.78%	4.43%
1975-77 to 1985-87	2.01%	1.44%	3.77%	5.73%	3.40%	6.78%	3.91%	4.97%	7.38%	7.08%	4.65%
1976-78 to 1986-88	2.26%	1.28%	4.14%	5.65%	2.96%	6.95%	4.04%	5.36%	7.30%	7.34%	4.73%
1977-79 to 1987-89	2.56%	0.94%	4.50%	5.49%	3.16%	6.96%	4.14%	5.72%	7.00%	7.51%	4.80%
1978-80 to 1988-90	2.83%	0.86%	4.81%	4.96%	3.58%	6.86%	4.27%	6.10%	6.66%	7.65%	4.86%
1979-81 to 1989-91	2.92%	0.99%	5.08%	4.80%	3.77%	6.72%	4.33%	6.53%	6.26%	7.68%	4.91%
1980-82 to 1990-92	2.83%	1.38%	5.27%	4.53%	3.78%	6.54%	4.30%	6.63%	5.83%	7.59%	4.87%
1981-83 to 1991-93	2.59%	1.70%	5.18%	4.24%	3.47%	6.22%	4.02%	6.49%	5.30%	7.29%	4.65%
1982-84 to 1992-94	2.59%	1.93%	4.80%	3.96%	3.02%	5.75%	3.64%	6.03%	4.65%	6.89%	4.33%
1983-85 to 1993-95	2.89%	2.06%	4.22%	3.75%	2.72%	5.14%	3.21%	5.50%	3.88%	6.44%	3.98%
1984-86 to 1994-96	3.41%	2.06%	3.58%	3.69%	3.14%	4.49%	2.77%	4.90%	3.15%	6.00%	3.72%
1985-87 to 1995-97	3.79%	2.06%	2.92%	1.92%	3.74%	3.91%	2.33%	4.42%	2.63%	5.54%	3.33%
1986-88 to 1996-98	3.95%	2.06%	2.30%	0.76%	3.99%	3.46%	1.87%	3.92%	2.39%	5.00%	2.97%
1987-89 to 1997-99	3.81%	2.06%	1.74%	-0.41%	3.52%	3.11%	1.42%	3.37%	2.31%	4.36%	2.53%
Average	2.41%	1.56%	3.46%	4.08%	3.50%	5.26%	3.46%	4.43%	5.23%	6.47%	3.99%

Central Region Electric Utility Proxy Group BVPS Ten-Year Compound Growth Rate Averages (1968-1999)

	Dayton	Detroit					Okla. Gas &		WPS Resources/	WI Energy/	
	P&L/	Edison/			Kansas City	Northern States	Electric/ OGE		Wisconsin	WI Electric	_
Years	DPL	DTE	Empire	IPALCO	P&L	Power	Energy Corp.	SJL&P	Public Serv.	Power	Average
1968-70 to 1978-80	1.40%	0.04%	2.37%	5.21%	1.88%	4.34%	5.76%	1.28%	4.13%	4.03%	3.05%
1969-71 to 1979-81	0.84%	-0.35%	1.93%	4.93%	1.51%	4.19%	4.58%	1.15%	4.37%	3.71%	2.69%
1970-72 to 1980-82	0.28%	-0.88%	1.63%	4.43%	1.19%	4.15%	3.83%	1.13%	4.50%	3.84%	2.41%
1971-73 to 1981-83	0.16%	-1.30%	1.58%	3.84%	1.20%	4.31%	3.00%	1.31%	4.57%	4.09%	2.27%
1972-74 to 1982-84	0.27%	-1.51%	1.89%	3.77%	1.35%	4.72%	2.66%	1.65%	4.89%	4.49%	2.42%
1973-75 to 1983-85	0.25%	-1.27%	2.32%	3.99%	1.88%	5.18%	2.33%	2.36%	5.27%	5.02%	2.73%
1974-76 to 1984-86	0.30%	-0.77%	2.82%	4.47%	2.26%	5.56%	2.43%	3.27%	5.56%	5.52%	3.14%
1975-77 to 1985-87	0.27%	-0.18%	3.17%	4.63%	2.54%	5.73%	2.33%	4.20%	5.57%	5.86%	3.41%
1976-78 to 1986-88	0.66%	-0.61%	3.51%	4.82%	2.32%	5.80%	2.33%	4.89%	5.42%	6.11%	3.53%
1977-79 to 1987-89	1.13%	-1.05%	3.79%	4.77%	2.28%	5.80%	2.30%	5.41%	5.16%	6.38%	3.60%
1978-80 to 1988-90	1.80%	-1.34%	4.17%	4.79%	2.28%	5.74%	2.57%	5.69%	4.77%	6.69%	3.72%
1979-81 to 1989-91	2.31%	-0.30%	4.59%	4.84%	2.44%	5.65%	2.92%	5.82%	4.27%	6.91%	3.95%
1980-82 to 1990-92	2.29%	0.97%	4.88%	4.92%	2.41%	5.43%	2.96%	5.72%	3.96%	6.94%	4.05%
1981-83 to 1991-93	1.97%	2.03%	4.82%	4.84%	2.10%	5.14%	2.75%	5.41%	3.75%	6.74%	3.95%
1982-84 to 1992-94	1.84%	2.72%	4.36%	4.50%	1.71%	4.77%	2.37%	5.01%	3.57%	6.33%	3.72%
1983-85 to 1993-95	2.33%	2.95%	3.83%	4.15%	1.17%	4.46%	2.16%	4.60%	3.29%	5.91%	3.48%
1984-86 to 1994-96	2.78%	2.82%	3.34%	3.73%	0.78%	4.21%	1.91%	4.27%	2.99%	5.48%	3.23%
1985-87 to 1995-97	3.14%	2.52%	2.92%	2.52%	0.41%	4.01%	1.85%	3.99%	2.77%	4.81%	2.89%
1986-88 to 1996-98	3.26%	3.25%	2.56%	1.45%	0.50%	3.81%	1.86%	3.75%	2.43%	3.99%	2.69%
1987-89 to 1997-99	3.42%	4.16%	2.20%	1.19%	0.42%	3.56%	2.04%	3.47%	2.20%	3.17%	2.58%
Average	1.54%	0.60%	3.13%	4.09%	1.63%	4.83%	2.75%	3.72%	4.17%	5.30%	3.18%

Central Region Electric Utility Proxy Group DPS, EPS, BVPS & GDP Ten-Year Compound Growth Rate Averages (1968-1999)

DPS		EPS	_	BVPS		Average	GDP	_
	10 yr compound		10 yr compound		10 yr compound	DPS, EPS and		10 yr compound
Years	growth rate avgs	Years	growth rate avgs	Years	growth rate avgs	BVPS	Years	growth rate avgs
1968-70 to 1978-80	3.03%	1968-70 to 1978-80	2.31%	1968-70 to 1978-80	3.05%	2.79%	1968-70 to 1978-80	10.05%
1969-71 to 1979-81	3.12%	1969-71 to 1979-81	2.57%	1969-71 to 1979-81	2.69%	2.79%	1969-71 to 1979-81	10.41%
1970-72 to 1980-82	3.28%	1970-72 to 1980-82	3.00%	1970-72 to 1980-82	2.41%	2.90%	1970-72 to 1980-82	10.42%
1971-73 to 1981-83	3.54%	1971-73 to 1981-83	4.13%	1971-73 to 1981-83	2.27%	3.32%	1971-73 to 1981-83	10.22%
1972-74 to 1982-84	3.84%	1972-74 to 1982-84	5.40%	1972-74 to 1982-84	2.42%	3.89%	1972-74 to 1982-84	10.03%
1973-75 to 1983-85	4.17%	1973-75 to 1983-85	6.30%	1973-75 to 1983-85	2.73%	4.40%	1973-75 to 1983-85	9.96%
1974-76 to 1984-86	4.43%	1974-76 to 1984-86	6.30%	1974-76 to 1984-86	3.14%	4.63%	1974-76 to 1984-86	9.77%
1975-77 to 1985-87	4.65%	1975-77 to 1985-87	5.85%	1975-77 to 1985-87	3.41%	4.64%	1975-77 to 1985-87	9.34%
1976-78 to 1986-88	4.73%	1976-78 to 1986-88	5.82%	1976-78 to 1986-88	3.53%	4.69%	1976-78 to 1986-88	8.80%
1977-79 to 1987-89	4.80%	1977-79 to 1987-89	5.93%	1977-79 to 1987-89	3.60%	4.77%	1977-79 to 1987-89	8.32%
1978-80 to 1988-90	4.86%	1978-80 to 1988-90	5.81%	1978-80 to 1988-90	3.72%	4.79%	1978-80 to 1988-90	7.92%
1979-81 to 1989-91	4.91%	1979-81 to 1989-91	5.32%	1979-81 to 1989-91	3.95%	4.72%	1979-81 to 1989-91	7.38%
1980-82 to 1990-92	4.87%	1980-82 to 1990-92	4.13%	1980-82 to 1990-92	4.05%	4.35%	1980-82 to 1990-92	7.06%
1981-83 to 1991-93	4.65%	1981-83 to 1991-93	2.60%	1981-83 to 1991-93	3.95%	3.74%	1981-83 to 1991-93	6.72%
1982-84 to 1992-94	4.33%	1982-84 to 1992-94	1.46%	1982-84 to 1992-94	3.72%	3.17%	1982-84 to 1992-94	6.49%
1983-85 to 1993-95	3.98%	1983-85 to 1993-95	1.24%	1983-85 to 1993-95	3.48%	2.90%	1983-85 to 1993-95	6.12%
1984-86 to 1994-96	3.72%	1984-86 to 1994-96	1.38%	1984-86 to 1994-96	3.23%	2.78%	1984-86 to 1994-96	5.89%
1985-87 to 1995-97	3.33%	1985-87 to 1995-97	1.10%	1985-87 to 1995-97	2.89%	2.44%	1985-87 to 1995-97	5.81%
1986-88 to 1996-98	2.97%	1986-88 to 1996-98	0.99%	1986-88 to 1996-98	2.69%	2.22%	1986-88 to 1996-98	5.73%
1987-89 to 1997-99	2.53%	1987-89 to 1997-99	0.83%	1987-89 to 1997-99	2.58%	1.98%	1987-89 to 1997-99	5.63%
Average	3.99%	Average	3.62%	Average	3.18%		Average	8.10%

Sources: Value Line Investment Survey and St. Louis Federal Reserve Website

Updated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for "the 2012 Rate Cases" Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.58%	4.27%	3.95%	3.63%	3.32%	3.00%	6.80%
American Electric Power	\$2.12	5.18%	4.82%	4.45%	4.09%	3.73%	3.36%	3.00%	7.34%
Cleco Corp.	\$1.60	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	6.34%
Great Plains Energy	\$0.98	4.62%	4.35%	4.08%	3.81%	3.54%	3.27%	3.00%	7.21%
IDACORP, Inc.	\$1.88	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	6.32%
Pinnacle West Capital	\$2.38	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	7.19%
Southern Company	\$2.10	3.71%	3.59%	3.47%	3.36%	3.24%	3.12%	3.00%	7.78%
Westar Energy, Inc.	\$1.40	3.38%	3.32%	3.25%	3.19%	3.13%	3.06%	3.00%	6.85%
Wisconsin Energy	\$1.69	5.27%	4.89%	4.51%	4.14%	3.76%	3.38%	3.00%	7.09%
Xcel Energy	\$1.20	4.97%	4.64%	4.31%	3.99%	3.66%	3.33%	3.00%	7.16%

Average	7.01%
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Average w/o Cleco and Wisconsin Energy

7.08%

Sources: Column 1 = SNL Financial

Updated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for "the 2012 Rate Cases" Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.67%	4.43%	4.20%	3.97%	3.73%	3.50%	7.20%
American Electric Power	\$2.12	5.18%	4.90%	4.62%	4.34%	4.06%	3.78%	3.50%	7.72%
Cleco Corp.	\$1.60	4.00%	3.92%	3.83%	3.75%	3.67%	3.58%	3.50%	6.74%
Great Plains Energy	\$0.98	4.62%	4.43%	4.25%	4.06%	3.87%	3.69%	3.50%	7.59%
IDACORP, Inc.	\$1.88	4.00%	3.92%	3.83%	3.75%	3.67%	3.58%	3.50%	6.73%
Pinnacle West Capital	\$2.38	4.00%	3.92%	3.83%	3.75%	3.67%	3.58%	3.50%	7.58%
Southern Company	\$2.10	3.71%	3.68%	3.64%	3.61%	3.57%	3.54%	3.50%	8.15%
Westar Energy, Inc.	\$1.40	3.38%	3.40%	3.42%	3.44%	3.46%	3.48%	3.50%	7.25%
Wisconsin Energy	\$1.69	5.27%	4.98%	4.68%	4.39%	4.09%	3.80%	3.50%	7.48%
Xcel Energy	\$1.20	4.97%	4.73%	4.48%	4.24%	3.99%	3.75%	3.50%	7.55%

	Average	7.40%
	Average w/o Cleco and	
Sources: Column 1 = SNL Financial	Wisconsin Energy	7.47%
Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.		

SCHEDULE 15-2

Updated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for "the 2012 Rate Cases" Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$2.04	4.90%	4.75%	4.60%	4.45%	4.30%	4.15%	4.00%	7.60%
American Electric Power	\$2.12	5.18%	4.98%	4.79%	4.59%	4.39%	4.20%	4.00%	8.11%
Cleco Corp.	\$1.60	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.15%
Great Plains Energy	\$0.98	4.62%	4.52%	4.41%	4.31%	4.21%	4.10%	4.00%	7.99%
IDACORP, Inc.	\$1.88	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.14%
Pinnacle West Capital	\$2.38	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.97%
Southern Company	\$2.10	3.71%	3.76%	3.81%	3.86%	3.90%	3.95%	4.00%	8.53%
Westar Energy, Inc.	\$1.40	3.38%	3.48%	3.59%	3.69%	3.79%	3.90%	4.00%	7.64%
Wisconsin Energy	\$1.69	5.27%	5.06%	4.85%	4.64%	4.42%	4.21%	4.00%	7.87%
Xcel Energy	\$1.20	4.97%	4.81%	4.65%	4.49%	4.32%	4.16%	4.00%	7.94%

Average **7.79%**

Average w/o Cleco and

Wisconsin Energy 7.86%

Sources: Column 1 = SNL Financial

Backdated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$1.80	6.18%	5.65%	5.12%	4.59%	4.06%	3.53%	3.00%	8.17%
American Electric Power	\$1.88	3.09%	3.08%	3.06%	3.05%	3.03%	3.02%	3.00%	8.66%
CMS Energy Corp.	\$0.96	5.90%	5.42%	4.93%	4.45%	3.97%	3.48%	3.00%	8.36%
DTE Energy Company	\$2.35	4.38%	4.15%	3.92%	3.69%	3.46%	3.23%	3.00%	8.05%
Great Plains Energy	\$0.85	7.63%	6.86%	6.09%	5.32%	4.54%	3.77%	3.00%	8.53%
OGE Energy Corp.	\$0.79	5.87%	5.39%	4.91%	4.44%	3.96%	3.48%	3.00%	6.71%
Pinnacle West Capital	\$2.10	6.18%	5.65%	5.12%	4.59%	4.06%	3.53%	3.00%	8.51%
Portland General Electric Compa	\$1.06	4.35%	4.13%	3.90%	3.68%	3.45%	3.23%	3.00%	8.05%
Southern Company	\$1.89	5.33%	4.94%	4.55%	4.17%	3.78%	3.39%	3.00%	8.13%
TECO Energy, Inc.	\$0.88	5.20%	4.83%	4.47%	4.10%	3.73%	3.37%	3.00%	9.07%
Westar Energy, Inc.	\$1.32	5.75%	5.29%	4.83%	4.38%	3.92%	3.46%	3.00%	8.85%
Xcel Energy	\$1.04	4.65%	4.38%	4.10%	3.83%	3.55%	3.28%	3.00%	7.72%

Average8.23%Average without OGE and TECO8.30%

Sources: Column 1 = SNL Financial

Backdated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$1.80	6.18%	5.73%	5.29%	4.84%	4.39%	3.95%	3.50%	8.53%
American Electric Power	\$1.88	3.09%	3.16%	3.23%	3.30%	3.36%	3.43%	3.50%	8.47%
CMS Energy Corp.	\$0.96	5.90%	5.50%	5.10%	4.70%	4.30%	3.90%	3.50%	8.67%
DTE Energy Company	\$2.35	4.38%	4.23%	4.09%	3.94%	3.79%	3.65%	3.50%	8.13%
Great Plains Energy	\$0.85	7.63%	6.94%	6.25%	5.57%	4.88%	4.19%	3.50%	9.15%
OGE Energy Corp.	\$0.79	5.87%	5.48%	5.08%	4.69%	4.29%	3.90%	3.50%	7.07%
Pinnacle West Capital	\$2.10	6.18%	5.73%	5.29%	4.84%	4.39%	3.95%	3.50%	8.87%
Portland General Electric	\$1.06	4.35%	4.21%	4.07%	3.93%	3.78%	3.64%	3.50%	8.12%
Southern Company	\$1.89	5.33%	5.03%	4.72%	4.42%	4.11%	3.81%	3.50%	8.36%
TECO Energy, Inc.	\$0.88	5.20%	4.92%	4.63%	4.35%	4.07%	3.78%	3.50%	9.23%
Westar Energy, Inc.	\$1.32	5.75%	5.38%	5.00%	4.63%	4.25%	3.88%	3.50%	9.12%
Xcel Energy	\$1.04	4.65%	4.46%	4.27%	4.08%	3.88%	3.69%	3.50%	7.86%

Average	8.47%
Average without OGE and TECO	8.53%

Sources: Column 1 = SNL Financial

Backdated Multiple-Stage Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Annualized	Growth			Growth			Growth	
	Quarterly	Years			Years			in	Cost of
Company Name	Dividend	1-5	6	7	8	9	10	Perpetuity	Equity
Alliant Energy	\$1.80	6.18%	5.82%	5.45%	5.09%	4.73%	4.36%	4.00%	8.91%
American Electric Power	\$1.88	3.09%	3.24%	3.39%	3.55%	3.70%	3.85%	4.00%	8.84%
CMS Energy Corp.	\$0.96	5.90%	5.58%	5.27%	4.95%	4.63%	4.32%	4.00%	9.04%
DTE Energy Company	\$2.35	4.38%	4.32%	4.25%	4.19%	4.13%	4.06%	4.00%	8.51%
Great Plains Energy	\$0.85	7.63%	7.03%	6.42%	5.82%	5.21%	4.61%	4.00%	9.51%
OGE Energy Corp.	\$0.79	5.87%	5.56%	5.25%	4.94%	4.62%	4.31%	4.00%	7.47%
Pinnacle West Capital	\$2.10	6.18%	5.82%	5.45%	5.09%	4.73%	4.36%	4.00%	9.24%
Portland General Electric Company	\$1.06	4.35%	4.29%	4.23%	4.18%	4.12%	4.06%	4.00%	8.50%
Southern Company	\$1.89	5.33%	5.11%	4.89%	4.67%	4.44%	4.22%	4.00%	8.73%
TECO Energy, Inc.	\$0.88	5.20%	5.00%	4.80%	4.60%	4.40%	4.20%	4.00%	9.58%
Westar Energy, Inc.	\$1.32	5.75%	5.46%	5.17%	4.88%	4.58%	4.29%	4.00%	9.48%
Xcel Energy	\$1.04	4.65%	4.54%	4.43%	4.33%	4.22%	4.11%	4.00%	8.25%

Average	8.84%
Average without OGE and TECO	8.90%

Sources: Column 1 = SNL Financial

Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries for the Comparable Electric Utility Companies

	(1)	(2)	(3)	(4)	(5)	(6)
			Arithmetic	Geometric	Arithmetic	Geometric
			Average	Average	CAPM	CAPM
			Market	Market	Cost of	Cost of
	Risk		Risk	Risk	Common	Common
	Free		Premium	Premium	Equity	Equity
Company Name	Rate	Beta	(1926-2013)	(1926-2013)	(1926-2013)	(1926-2013)
Alliant Energy	2.97%	0.83	6.20%	4.64%	8.13%	6.83%
Ameren Corp.	2.97%	0.76	6.20%	4.64%	7.67%	6.49%
American Electric Power	2.97%	0.73	6.20%	4.64%	7.47%	6.33%
CMS Energy Corp.	2.97%	0.77	6.20%	4.64%	7.72%	6.52%
DTE Energy Company	2.97%	0.75	6.20%	4.64%	7.63%	6.46%
Great Plains Energy	2.97%	0.87	6.20%	4.64%	8.38%	7.02%
OGE Energy Corp.	2.97%	0.93	6.20%	4.64%	8.71%	7.27%
Pinnacle West Capital	2.97%	0.78	6.20%	4.64%	7.80%	6.58%
PNM Resources, Inc.	2.97%	0.88	6.20%	4.64%	8.42%	7.05%
Portland General Electric Co.	2.97%	0.79	6.20%	4.64%	7.88%	6.65%
Southern Company	2.97%	0.56	6.20%	4.64%	6.43%	5.56%
TECO Energy Inc.	2.97%	0.86	6.20%	4.64%	8.30%	6.96%
Westar Energy, Inc.	2.97%	0.78	6.20%	4.64%	7.80%	6.58%
Xcel Energy	2.97%	0.66	6.20%	4.64%	7.09%	6.06%
Average		0.78			7.82%	6.60%
Average without OGE and T	ECO	0.76			7.70%	6.51%

Column 1 = The appropriate yield is equal to the average 30-year U.S. Treasury Bond yield for October, November and December 2014 which was obtained from the St. Louis Federal Reserve website at http://research.stlouisfed.org/fred2/data/GS30.txt

- Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole. Staff calculated the unadjusted Beta for each company using an Excel spreadsheet designed specifically to be used with the SNL database market and financial information, then adjusted each Beta using the Blume adjustment formula as used by Value Line: Adjusted Beta = 0.35 + 0.67 * Unadjusted Beta
- Column 3 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 - 2013 was determined to be 6.20% based on an arithmetic average as calculated in Duff & Phelps 2014 Valuation Handbook: A Guide to the Cost of Capital.
- Column 4 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investra risk free investment. The appropriate Market Risk Premium for the period 1926 - 2013 was determined to be 4.64% based on a geometric average geometric average calculated by using the arithmetic average as calculated in Duff & Phelps 2014 Valuation Handbook: A Guide to the Cost of Capital.

$$\begin{split} R_{A} = R_{g} + (\sigma^{2}/2) \\ R_{A} = & \text{Arithmetic Return Average} \\ R_{g} = & \text{Geometric Return Average} \\ \sigma = & \text{standard deviation of equity returns} \end{split}$$

Column 5 = (Column 1 + (Column 2 * Column 3)).

Column 6 = (Column 1 + (Column 2 * Column 4)).

Recommended Allowed Rate of Return as of August 31, 2014 for The Empire District Electric Company

			Allowed Rate of Return Using Common Equity Return of:			
	Percentage	Embedded				
Capital Component	of Capital	Cost	9.25%	9.50%	9.75%	
Common Stock Equity	51.71%		4.78%	4.91%	5.04%	
Long-Term Debt	48.29%	5.56%	2.69%	2.69%	2.69%	
Total	100.00%		7.47%	7.60%	7.73%	

Notes:

See Schedule 7 for the Capital Structure Ratios.