

**MISSOURI PUBLIC SERVICE COMMISSION**

**STAFF REPORT  
COST OF SERVICE  
REVENUE REQUIREMENT**

**APPENDIX 2**

**Support for Staff  
Cost of  
Capital Recommendations**

**UNION ELECTRIC COMPANY**

**d/b/a Ameren Missouri**

**CASE NO. ER-2014-0258**

*Jefferson City, Missouri  
December 2012*

**AN ANALYSIS OF THE COST OF CAPITAL**

**FOR**

**Union Electric Company d/b/a Ameren Missouri**

**Case No. ER-2014-0258**

**SCHEDULES**

**BY**

**DAVID MURRAY**

**REGULATORY REVIEW DIVISION - UTILITY SERVICES**

**MISSOURI PUBLIC SERVICE COMMISSION**

**DECEMBER 2014**

**Union Electric Company d/b/a Ameren Missouri**  
**Case No. ER-2014-0258**

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**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**Federal Reserve Discount Rates Changes and Federal Reserve Funds Rates Changes**

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve 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		8.00% *	08/21/01	3.00%	3.50%
10/29/90		7.75%	09/17/01	2.50%	3.00%
11/13/90		7.50%	10/02/01	2.00%	2.50%
12/07/90		7.25%	11/06/01	1.50%	2.00%
12/18/90		7.00%	12/11/01	1.25%	1.75%
12/19/90	6.50%		11/06/02	0.75%	1.25%
01/09/91		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		5.50%	03/16/08	3.25%	
12/12/97	5.00%		03/18/08	2.50%	2.25%
01/09/98	5.00%		04/30/08	2.25%	2.00%
03/06/98	5.00%		10/08/08	1.75%	1.50%
09/29/98		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 <http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

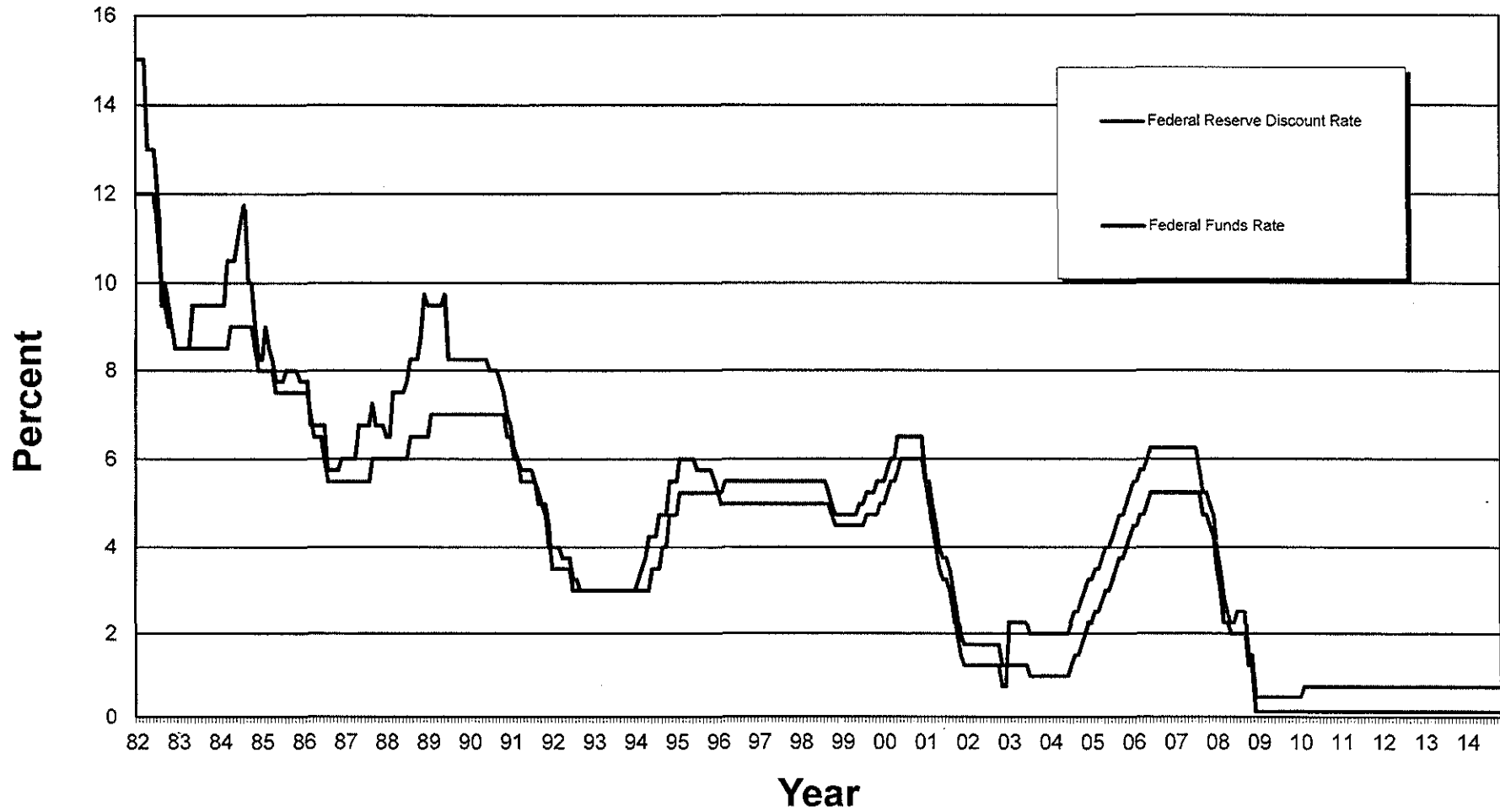
Federal Reserve Funds rate <http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html>

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

Union Electric Company d/b/a Ameren Missouri  
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Federal Reserve Discount Rates and Federal Funds Rates

1982 - 2014



Union Electric Company d/b/a Ameren Missouri  
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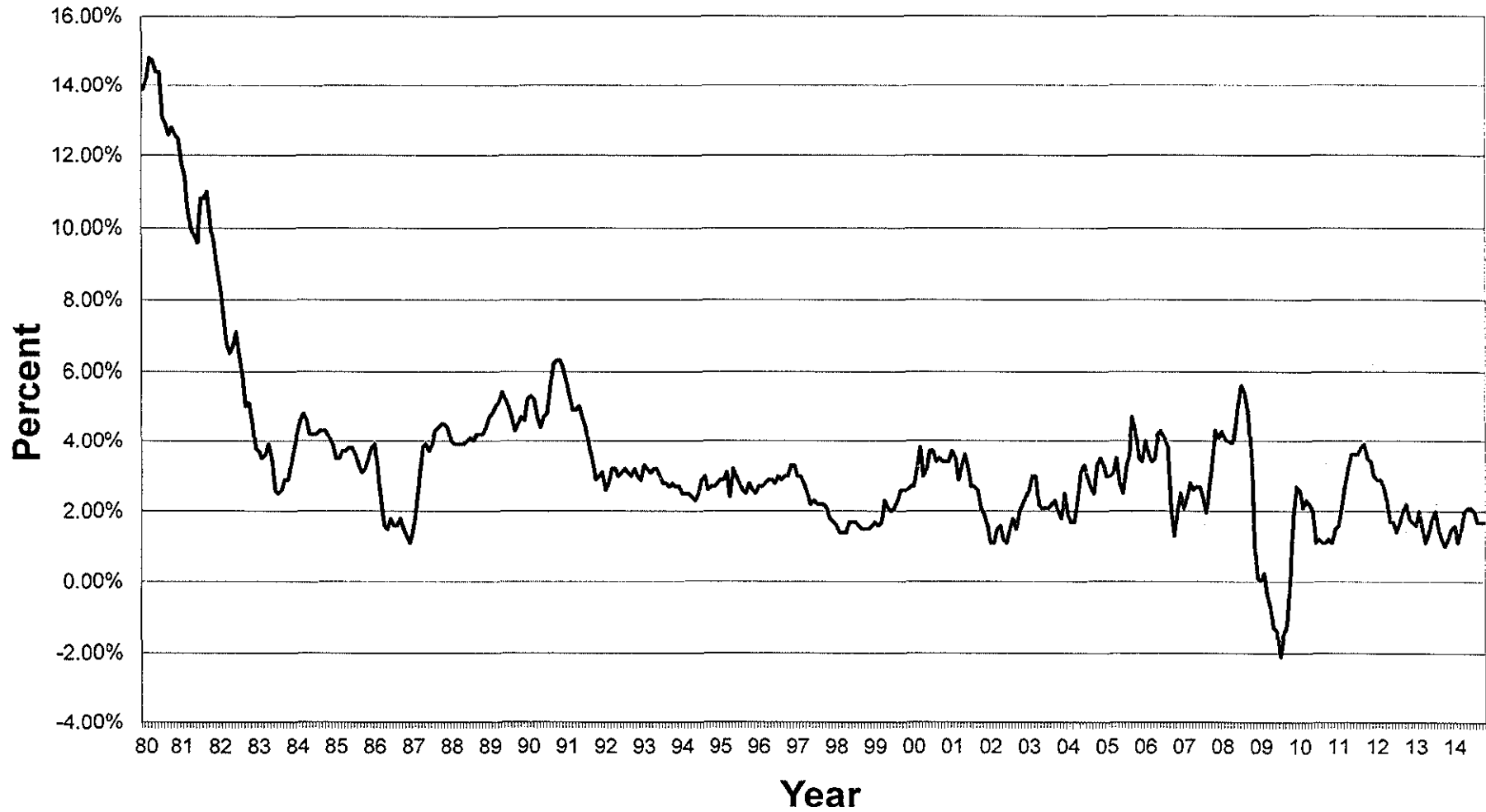
Rate of Inflation

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	13.90	Jan 1984	4.20	Jan 1988	4.00	Jan 1992	2.60	Jan 1996	2.70	Jan 2000	2.70	Jan 2004	1.90	Jan 2008	4.30	Jan 2012	2.80		
Feb	14.20	Feb	4.60	Feb	3.90	Feb	2.80	Feb	2.70	Feb	3.20	Feb	1.70	Feb	4.00	Feb	2.80		
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	-1.60	Aug	1.60		
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	7.80	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	Apr	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				
Dec	3.80	Dec	1.10	Dec	6.10	Dec	2.80	Dec	1.60	Dec	2.40	Dec	2.50	Dec	1.50				
Jan 1983	3.70	Jan 1987	1.50	Jan 1991	5.70	Jan 1995	2.90	Jan 1999	1.70	Jan 2003	2.60	Jan 2007	2.10	Jan 2011	1.60				
Feb	3.50	Feb	2.10	Feb	5.30	Feb	2.90	Feb	1.80	Feb	3.00	Feb	2.40	Feb	2.10				
Mar	3.60	Mar	3.00	Mar	4.90	Mar	3.10	Mar	1.70	Mar	3.00	Mar	2.60	Mar	2.70				
Apr	3.90	Apr	3.80	Apr	4.90	Apr	2.40	Apr	2.30	Apr	2.20	Apr	2.60	Apr	3.20				
May	3.50	May	3.90	May	5.00	May	3.20	May	2.10	May	2.10	May	2.70	May	3.60				
Jun	2.60	Jun	3.70	Jun	4.70	Jun	3.00	Jun	2.00	Jun	2.10	Jun	2.70	Jun	3.60				
Jul	2.50	Jul	3.90	Jul	4.40	Jul	2.80	Jul	2.10	Jul	2.10	Jul	2.40	Jul	3.60				
Aug	2.80	Aug	4.30	Aug	3.80	Aug	2.80	Aug	2.30	Aug	2.20	Aug	2.00	Aug	3.80				
Sep	2.80	Sep	4.40	Sep	3.40	Sep	2.50	Sep	2.60	Sep	2.30	Sep	2.80	Sep	3.90				
Oct	2.90	Oct	4.50	Oct	2.90	Oct	2.80	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	2.70	Dec	1.90	Dec	4.10	Dec	3.00				

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](http://www.bls.gov/schedule/archives/cpi_nr.htm)

Union Electric Company d/b/a Ameren Missouri  
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Rate of Inflation  
1980 - 2014



Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258  
Average Yields on AA, A and BBB Public Utility Bonds

Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	12.12	Jan 1984	13.40	Jan 1988	10.75	Jan 1992	8.67	Jan 1996	7.20	Jan 2000	8.22	Jan 2004	6.23	Jan 2008	6.08	Jan 2012	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	12.12	Jul	14.92	Jul	10.90	Jul	8.46	Jul	8.02	Jul	8.17	Jul	6.34	Jul	6.50	Jul	4.56
Aug	12.62	Aug	14.29	Aug	11.09	Aug	8.34	Aug	7.84	Aug	8.05	Aug	6.18	Aug	6.48	Aug	4.71
Sep	13.29	Sep	14.04	Sep	10.56	Sep	8.32	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	14.88	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
Jun	15.27	Jun	11.91	Jun	9.49	Jun	7.68	Jun	7.77	Jun	7.75	Jun	5.39	June	6.54	Jun	4.70
Jul	15.87	Jul	11.88	Jul	9.34	Jul	7.53	Jul	7.52	Jul	7.71	Jul	5.50	July	6.15	Jul	4.90
Aug	16.33	Aug	11.83	Aug	9.37	Aug	7.21	Aug	7.57	Aug	7.57	Aug	5.51	Aug	5.90	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	5.84	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	7.89	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	7.82	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	8.42	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	8.76	Nov	9.00	Nov	6.96	Nov	7.31	Nov	5.82	Nov	5.45		
Dec	13.55	Dec	8.96	Dec	9.57	Dec	8.79	Dec	6.84	Dec	7.20	Dec	5.83	Dec	5.61		
Jan 1983	13.46	Jan 1987	8.77	Jan 1991	9.58	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	6.88	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	7.82	Sep	7.87	Sep	6.58	Sep	6.24	Sep	5.01		
Oct	13.19	Oct	11.32	Oct	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	7.85	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)



Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258  
Average Yields on Thirty-Year U.S. Treasury Bonds

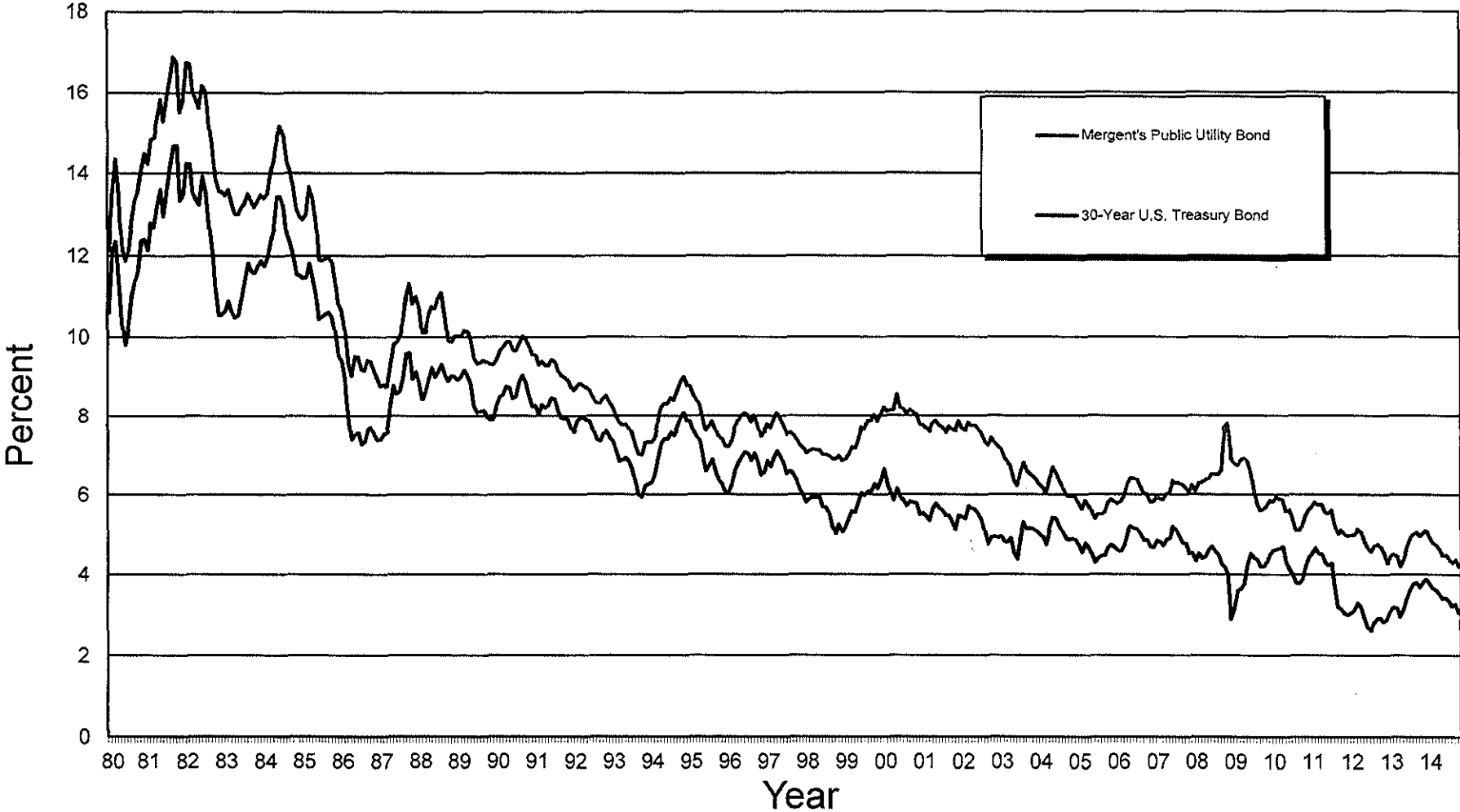
Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)	Mo/Year	Rate (%)
Jan 1980	10.60	Jan 1984	11.75	Jan 1988	8.83	Jan 1992	7.58	Jan 1996	6.95	Jan 2000	6.63	Jan 2004	4.99	Jan 2008	4.33	Jan 2012	3.03
Feb	12.13	Feb	11.85	Feb	8.43	Feb	7.65	Feb	6.24	Feb	6.23	Feb	4.93	Feb	4.52	Feb	3.11
Mar	12.34	Mar	12.38	Mar	8.63	Mar	7.97	Mar	6.05	Mar	6.05	Mar	4.74	Mar	4.39	Mar	3.28
Apr	11.40	Apr	12.85	Apr	8.95	Apr	7.96	Apr	6.79	Apr	5.85	Apr	5.14	Apr	4.44	Apr	3.18
May	10.38	May	13.43	May	9.23	May	7.89	May	6.93	May	6.15	May	5.42	May	4.60	May	2.83
Jun	9.81	Jun	13.44	Jun	9.00	Jun	7.84	Jun	7.08	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	5.08	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	4.68	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	6.89	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	4.78	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	6.83	Jul	6.51	Jul	5.61	Jul	4.41	July	4.41	July	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	4.87	Oct	4.19	Oct	3.68
Nov	13.35	Nov	10.06	Nov	7.80	Nov	6.21	Nov	6.11	Nov	5.12	Nov	4.73	Nov	4.31	Nov	3.80
Dec	13.45	Dec	8.54	Dec	7.60	Dec	6.25	Dec	5.89	Dec	5.48	Dec	4.68	Dec	4.48	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	8.83	Feb	8.50	Feb	6.49	Feb	5.89	Feb	5.39	Feb	4.58	Feb	4.62	Feb	3.86
Mar	13.53	Mar	7.98	Mar	8.56	Mar	6.91	Mar	5.95	Mar	5.71	Mar	4.73	Mar	4.84	Mar	3.62
Apr	13.37	Apr	7.39	Apr	8.76	Apr	7.27	Apr	5.92	Apr	5.67	Apr	5.08	Apr	4.69	Apr	3.52
May	13.24	May	7.52	May	8.73	May	7.41	May	5.83	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	5.18	Jun	4.13	Jun	3.42
Jul	13.55	Jul	7.27	Jul	8.50	Jul	7.58	Jul	5.88	Jul	5.38	July	5.13	July	3.99	Jul	3.33
Aug	12.77	Aug	7.33	Aug	8.88	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	8.03	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	8.88	Oct	7.84	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	
Dec	10.54	Dec	7.37	Dec	8.24	Dec	7.87	Dec	5.08	Dec	4.92	Dec	4.68	Dec	4.42	Dec	
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	Jan	
Feb	10.88	Feb	7.54	Feb	9.03	Feb	7.61	Feb	5.37	Feb	4.81	Feb	4.82	Feb	4.65	Feb	
Mar	10.83	Mar	7.55	Mar	8.29	Mar	7.45	Mar	5.58	Mar	4.80	Mar	4.72	Mar	4.51	Mar	
Apr	10.48	Apr	8.25	Apr	8.25	Apr	7.36	Apr	5.55	Apr	4.90	Apr	4.86	Apr	4.50	Apr	
May	10.53	May	8.78	May	8.27	May	6.95	May	5.81	May	4.53	May	4.80	May	4.29	May	
Jun	10.93	Jun	8.57	Jun	8.47	Jun	6.57	Jun	6.04	Jun	4.37	Jun	5.20	Jun	4.23	Jun	
Jul	11.40	Jul	8.64	Jul	8.45	Jul	6.72	Jul	5.98	Jul	4.93	July	5.11	Jul	4.27	Jul	
Aug	11.82	Aug	8.97	Aug	8.14	Aug	6.96	Aug	6.07	Aug	5.30	Aug	4.93	Aug	3.85	Aug	
Sep	11.63	Sep	8.59	Sep	7.95	Sep	6.55	Sep	6.07	Sep	5.14	Sep	4.79	Sep	3.18	Sep	
Oct	11.58	Oct	9.61	Oct	7.93	Oct	6.37	Oct	6.26	Oct	5.18	Oct	4.77	Oct	3.13	Oct	
Nov	11.75	Nov	8.85	Nov	7.92	Nov	8.28	Nov	6.15	Nov	5.13	Nov	4.52	Nov	3.02	Nov	
Dec	11.88	Dec	8.12	Dec	7.70	Dec	8.06	Dec	6.35	Dec	5.08	Dec	4.53	Dec	2.98	Dec	

Sources:

<http://finance.yahoo.com/cbp?e=^TYX>  
<http://research.stlouisfed.org/fred2/data/GS30.txt>

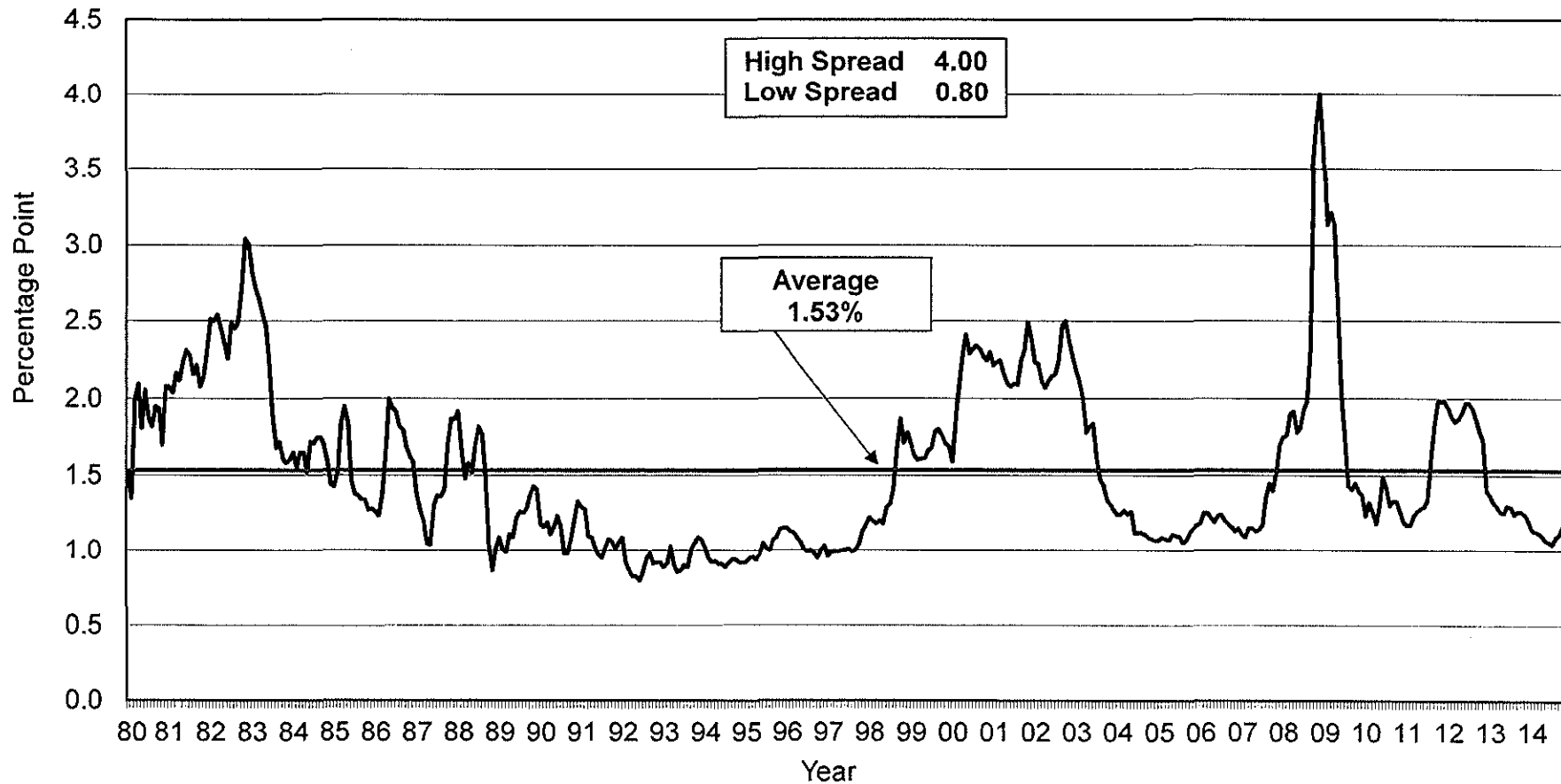
Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

Average Yields on Mergent's Public Utility Bonds and  
Thirty-Year U.S. Treasury Bonds (1980 - 2014)



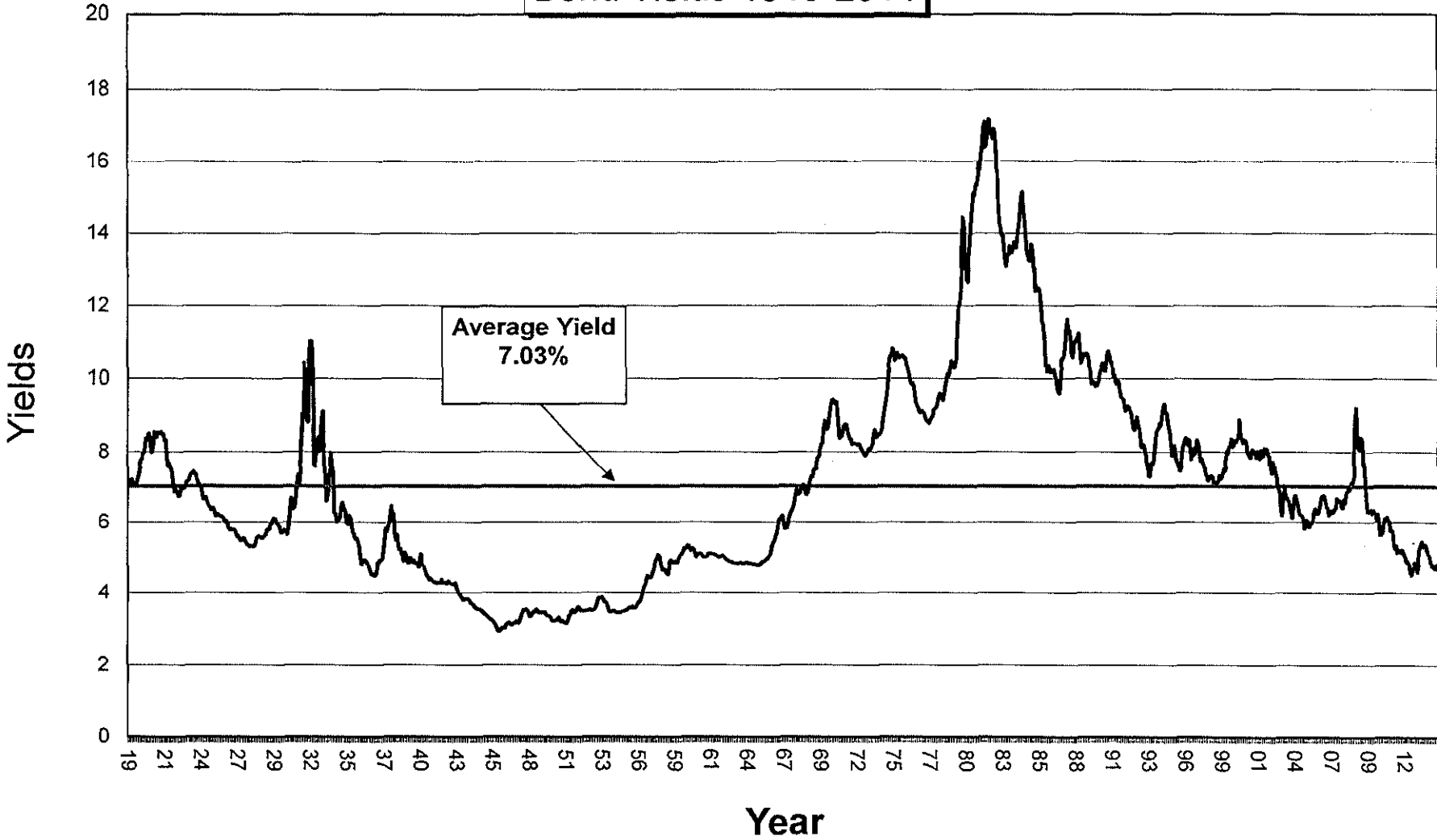
Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

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



Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

Moody's Baa Corporate  
Bond Yields 1919-2014



Source: St. Louis Federal Reserve Website: <http://stlouisfed.org>

**Union Electric Company d/b/a Ameren Missouri**  
**Case No. ER-2014-0258**

**Historical Consolidated Capital Structures for Union Electric Company**

*(Millions of Dollars)*

<u>Capital Components</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>9/30/2014</u>
Common Equity	\$3,944.0	\$4,073.0	\$3,957.0	\$3,974.0	\$3,913.0	\$4,041.0
Preferred Stock	\$113	80.0	80.0	80.0	80.0	80.0
Long-Term Debt	4,022.0 *	3,954.0 *	4,022.0 *	4,006.0	3,910.0	4,004.0
Short-Term Debt	0.0	0.0	0.0	0.0	105.0	65.0
Total	<u>\$8,079.0</u>	<u>\$8,107.0</u>	<u>\$8,059.0</u>	<u>\$8,060.0</u>	<u>\$8,008.0</u>	<u>\$8,190.0</u>

**Historical Consolidated Capital Structures for Ameren**

*(Millions of Dollars)*

<u>Capital Components</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>9/30/2014</u>
Common Equity	\$7,865.0	\$7,742.0	\$7,926.0	\$6,625.0	\$6,544.0	\$6,774.0
Preferred Stock	195.0	142.0	142.0	142.0	142.0	142.0
Long-Term Debt	7,317.0 *	7,008.0	6,856.0 *	6,157.0	6,038.0	5,944.0
Short-Term Debt	20.0	269.0	148.0	0.0	368.0	753.0
Total	<u>\$15,397.0</u>	<u>\$15,161.0</u>	<u>\$15,072.0</u>	<u>\$12,924.0</u>	<u>\$13,092.0</u>	<u>\$13,613.0</u>

Source: Ameren's Annual SEC 10-K Filings and 9/30/2014 10-Q Filing.

Note: \*Includes current maturities of long-term debt.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**Historical Consolidated Capital Structures for Union Electric Company**

*(in Percentages)*

<u>Capital Components</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>9/30/2014</u>	<u>Average</u>
Common Equity	48.82%	50.24%	49.10%	49.31%	48.86%	49.34%	49.28%
Preferred Stock	1.40%	0.99%	0.99%	0.99%	1.00%	0.98%	1.06%
Long-Term Debt	49.78% *	48.77% *	49.91% *	49.70% *	48.83% *	48.89%	49.31%
Short-Term Debt	0.00%	0.00%	0.00%	0.00%	1.31%	0.79%	0.35%
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>

**Historical Consolidated Capital Structures for Ameren**

*(in Percentages)*

<u>Capital Components</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>9/30/2014</u>	<u>Average</u>
Common Equity	51.08%	51.07%	52.59%	51.26%	49.98%	49.76%	50.96%
Preferred Stock	1.27%	0.94%	0.94%	1.10%	1.08%	1.04%	1.06%
Long-Term Debt	47.52%	46.22%	45.49%	47.64%	46.12%	43.66%	46.11%
Short-Term Debt	0.13%	1.77%	0.98%	0.00%	2.81%	5.53%	1.87%
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>

Sources: Ameren's 10-K Filings and 9/30/2014 10-Q Filing.

**Union Electric Company d/b/a Ameren Missouri**  
**Case No. ER-2014-0258**

**Capital Structure as of March 31, 2014**  
**Union Electric Company**

<u>Capital Component</u>	<u>Dollar Amount</u>	<u>Percentage of Capital</u>
Common Stock Equity	\$ 3,882,655,029	52.96%
Preferred Stock	\$ 81,827,509	1.12%
Long-Term Debt	\$ 3,366,400,947	45.92%
Short-Term Debt	\$ -	0.00%
<b>Total Capitalization</b>	<u><u>\$ 7,330,883,485</u></u>	<u><u>100.00%</u></u>

Source: Page 6 Company Witness Ryan J. Martin's Direct Testimony.

**Union Electric Company d/b/a Ameren Missouri**  
Case No. ER-2014-0258

Criteria for Selecting Comparable Electric Utility Companies												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
S&P Financial Power Companies	Ticker	Stock Publicly Traded	Regulated (FERR)	At least 50% of Plant from Electric Utility	At least 25% of Electric Plant Generation	At Least 80% of Income from Regulated Utility Operations	No Reduced Dividend Since 2011	At Least Investment Grade Credit Rating (2 of 3 agencies)	L-T Growth Coverage from at least 2 equity analysts in last 90 days and Current L-T Growth Availabl	No Announced Merger or Acquisition	Comparable Company Met All Criteria	
AES Corporation	AES	Yes	NA									
ALLETE, Inc.	ALE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
<b>Alliant Energy Corporation</b>	<b>LNT</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
<b>Ameren Corporation</b>	<b>AET</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
<b>American Electric Power Company</b>	<b>AEP</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
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									
Chenapeake Utilities Corporation	CPK	Yes	NA									
Cleco Corporation	CNL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
<b>CMS Energy Corporation</b>	<b>CMS</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Consolidated Edison, Inc.	ED	Yes	Yes	Yes	No							
Covanta Holding Corporation	CVA	Yes	NA									
Dominion Resources, Inc.	D	Yes	No									
<b>DTE Energy Company</b>	<b>DTE</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Duke Energy Corporation	DUK	Yes	Yes	Yes	Yes	No						
Dynegy Inc.	DYN	Yes	NA									
Edison International	ED	Yes	Yes	Yes	No							
El Paso Electric Company	EE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
Empire District Electric Company	EDF	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
Energy Corporation	ETR	Yes	Yes	Yes	Yes	No						
Exelon Corporation	EXC	Yes	No									
FirstEnergy Corp.	FE	Yes	No									
<b>Great Plains Energy Inc.</b>	<b>GXP</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Hawaiian Electric Industries, Inc.	HE	Yes	No									
IDACORP, Inc.	IDA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No			
Integrus Energy Group, Inc.	TEG	Yes	Yes	No								
ITC Holdings Corp.	ITC	Yes	NA									
MDU Resources Group, Inc.	MDU	Yes	No									
MGEE 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	NI	Yes	Yes	Yes	No							
NorthWestern Corporation	NWE	Yes	Yes	Yes	No							
NRG Energy, Inc.	NRG	Yes	NA									
NRG Yield, Inc.	NYLD	Yes	NA									
<b>OGE Energy Corp.</b>	<b>OGE</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Ormat Technologies, Inc.	ORA	Yes	NA									
Otter Tail Corporation	OTTR	Yes	Yes	Yes	Yes	No						
Pattern Energy Group Inc.	PEGI	Yes	NA									
Pepco Holdings, Inc.	POM	Yes	Yes	Yes	No							
PG&E Corporation	PCG	Yes	Yes	Yes	No							
<b>Plains West Capital Corporation</b>	<b>PNW</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
<b>PNM Resources, Inc.</b>	<b>PNM</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
<b>Portland General Electric Company</b>	<b>POR</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
PPL Corporation	PPL	Yes	No									
Public Service Enterprise Group Inc.	PEG	Yes	No									
SCANA Corporation	SCG	Yes	No									
Sampa Energy	SRE	Yes	No									
<b>Southern Company</b>	<b>SO</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Spark Energy, Inc.	SPKE	Yes	NA									
<b>TECO Energy, Inc.</b>	<b>TE</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
TerraForm Power, Inc.	TERP	Yes	NA									
UGI Corporation	UGI	Yes	NA									
Util Holdings Corporation	UHL	Yes	Yes	Yes	No							
Utili Corporation	UTIL	Yes	Yes	No								
UNS Energy Corporation	NA	No										
Vectren Corporation	VVC	Yes	No									
<b>Westar Energy, Inc.</b>	<b>WR</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	
Wisconsin Energy Corporation	WEC	Yes	Yes	Yes	Yes	No						
<b>Xcel Energy Inc.</b>	<b>XEL</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	

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

NA = Not available



**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**Comparable Electrical Utility Companies  
for Union Electric Company d/b/a Ameren Missouri**

Number	Ticker Symbol	Company Name	S&P Corporate Credit 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	A
12	TE	TECO Energy, Inc.	BBB+
13	WR	Westar Energy, Inc.	BBB+
14	XEL	Xcel Energy	A-
		Average	<u>BBB+</u>
		Ameren and Union Electric	BBB+

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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	2.32	2.19	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.	1.75	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	2.99	2.85	2.71	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	1.07	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.	0.92	0.81	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	1.20	1.12	1.10	1.08	1.06	1.04	1.01	0.97	0.93	0.68	NA	NA	NA	NA	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.	1.54	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

	<u>10-Year Historical</u>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
Alliant Energy	0.74%	7.09%	7.33%
Ameren Corp.	-4.61%	-9.00%	3.09%
American Electric Power	-1.26%	3.77%	4.59%
CMS Energy Corp.	1.01%	38.17%	6.34%
DTE Energy Company	1.71%	3.00%	4.94%
Great Plains Energy	-6.46%	-12.38%	6.79%
OGE Energy Corp.	1.90%	3.25%	9.51%
Pinnacle West Capital	3.67%	2.35%	4.34%
PNM Resources, Inc.	0.15%	-6.05%	10.60%
Portland General Electric Company	NA	4.60%	5.92%
Southern Company	3.63%	3.99%	3.39%
TECO Energy, Inc.	-3.44%	2.30%	1.01%
Westar Energy, Inc.	2.28%	4.10%	4.29%
Xcel Energy	-0.49%	3.25%	5.68%
<b>Average</b>	<b>-0.09%</b>	<b>3.46%</b>	<b>5.56%</b>
<b>Average without OGE and TECO</b>	<b>0.03%</b>	<b>3.57%</b>	<b>5.61%</b>

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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	3.83	3.64	3.48	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	3.73	3.55	3.46	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	4.93	4.60	4.37	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	1.59	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.	2.28	2.11	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	NA	2.70	2.47	2.79	3.86
PNM Resources, Inc.	1.81	1.54	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	2.37	2.28	2.17	1.36	1.87	1.95	1.66	1.31	1.39	2.33	1.14	NA	NA	NA	NA	NA
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	2.43	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	2.20	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

	<u>10-Year Historical</u>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
Alliant Energy	8.40%	-0.17%	5.20%
Ameren Corp.	-4.15%	-6.68%	8.73%
American Electric Power	4.62%	0.23%	7.05%
CMS Energy Corp.	NM	NM	5.41%
DTE Energy Company	3.28%	3.41%	9.42%
Great Plains Energy	0.26%	-0.28%	4.42%
OGE Energy Corp.	10.95%	7.60%	5.13%
Pinnacle West Capital	1.17%	4.83%	2.85%
PNM Resources, Inc.	-0.15%	NM	12.88%
Portland General Electric Company	NA	1.28%	20.41%
Southern Company	2.64%	1.40%	16.57%
TECO Energy, Inc.	-3.07%	-3.45%	8.48%
Westar Energy, Inc.	8.18%	3.42%	3.56%
Xcel Energy	1.31%	5.30%	4.90%
<b>Average</b>	<b>2.79%</b>	<b>1.41%</b>	<b>8.22%</b>
<b>Average without OGE and TECO</b>	<b>2.56%</b>	<b>1.27%</b>	<b>8.45%</b>

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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.	28.65	28.10	27.13	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	36.44	34.78	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.	15.34	14.45	13.61	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	50.84	48.77	46.77	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.	17.65	16.87	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	43.46	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.	23.49	22.54	21.72	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	26.82	26.02	24.06	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	22.17	21.20	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>	<u>5-Year Historical</u>	<u>3-Year Projected</u>
Alliant Energy	3.54%	3.17%	6.54%
Ameren Corp.	0.64%	-2.19%	2.04%
American Electric Power	4.08%	4.71%	4.93%
CMS Energy Corp.	1.78%	3.99%	5.74%
DTE Energy Company	4.42%	4.06%	4.36%
Great Plains Energy	5.41%	3.27%	2.92%
OGE Energy Corp.	8.77%	8.57%	4.88%
Pinnacle West Capital	2.43%	1.03%	4.51%
PNM Resources, Inc.	2.00%	-0.75%	3.78%
Portland General Electric Company	-1.29%	1.85%	4.81%
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%	4.89%
<b>Average</b>	<b>3.00%</b>	<b>3.17%</b>	<b>4.44%</b>
<b>Average without OGE and TECO</b>	<b>2.91%</b>	<b>2.72%</b>	<b>4.53%</b>

Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

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

Company Name	10-Year Annual Compound Growth Rates			Average of 10 Year Annual Compound Growth Rates
	DPS	EPS	BVPS	
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%
<b>Average</b>	<b>-0.09%</b>	<b>2.79%</b>	<b>3.00%</b>	<b>1.74%</b>
<b>Average without OGE and TECO</b>	<b>0.03%</b>	<b>2.56%</b>	<b>2.91%</b>	<b>1.66%</b>

Source: SNL Energy.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

Company Name	5-Year Annual Compound Growth Rates			Average of 5 Year Annual Compound Growth Rates
	DPS	EPS	BVPS	
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%
<b>Average</b>	<b>3.46%</b>	<b>1.41%</b>	<b>3.17%</b>	<b>3.03%</b>
<b>Average without OGE and TECO</b>	<b>3.57%</b>	<b>1.27%</b>	<b>2.72%</b>	<b>2.94%</b>

Source: SNL Energy.

Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

**Historical and Projected Growth Rates for the  
Fourteen Comparable Electric Companies**

Company Name	(1)	(2)	(3)
	10-Year Historical Growth Rate (DPS, EPS and BVPS)	5-Year Historical Growth Rate (DPS, EPS and BVPS)	Projected 5-Year EPS Growth FactSet (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%	6.29
Great Plains Energy	-0.26%	-3.13%	4.78
OGE Energy Corp.	7.20%	6.48%	6.47
Pinnacle West Capital	2.42%	2.74%	3.95
PNM Resources, Inc.	0.67%	NM	7.80
Portland General Electric Company	-1.29%	2.58%	7.84
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
<b>Average</b>	<b>1.77%</b>	<b>2.06%</b>	<b>5.74</b>
<b>Average without OGE and TECO</b>	<b>1.68%</b>	<b>1.76%</b>	<b>5.60</b>

Sources: Column 1 = Schedule 9-4

Column 2 = Schedule 9-5.

Column 3 = SNL Energy

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

Company Name	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	-- August 2014 --		-- September 2014 --		-- October 2014 --		Average High/Low Stock Price (08/14 - 10/14)
	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	High Stock Price	Low Stock Price	
Alliant Energy	58.51	55.04	59.36	54.69	62.30	55.38	57.55
Ameren Corp.	39.99	36.65	40.31	37.53	42.71	38.25	39.24
American Electric Power	53.71	49.06	53.88	51.58	58.61	51.97	53.14
CMS Energy Corp.	30.54	27.90	30.83	29.15	32.91	29.59	30.15
DTE Energy Company	78.26	71.60	78.89	74.62	82.33	75.76	76.91
Great Plains Energy	25.91	24.09	25.80	23.91	27.00	24.11	25.14
OGE Energy Corp.	37.60	34.88	37.76	35.15	37.56	33.06	36.00
Pinnacle West Capital	56.97	52.13	57.74	54.13	61.56	54.59	56.19
PNM Resources, Inc.	26.25	24.26	26.97	24.76	29.33	24.81	26.06
Portland General Electric Company	34.47	31.41	34.55	31.70	36.86	32.07	33.51
Southern Company	44.40	41.87	44.82	43.04	47.69	43.55	44.23
TECO Energy, Inc.	18.10	16.91	18.14	16.98	19.87	17.35	17.89
Westar Energy, Inc.	37.09	34.53	37.07	33.76	37.91	33.73	35.68
Xcel Energy	32.06	29.60	32.48	30.12	33.76	30.18	31.37

Notes:

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

Source: <http://finance.yahoo.com>



**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

	(1)	(2)	(3)
Company Name	Expected Annual Dividend	Average High/Low Stock Price	Projected Dividend Yield
Alliant Energy	\$2.16	\$57.547	3.76%
Ameren Corp.	\$1.66	\$39.240	4.24%
American Electric Power	\$2.11	\$53.135	3.98%
CMS Energy Corp.	\$1.14	\$30.153	3.77%
DTE Energy Company	\$2.82	\$76.910	3.67%
Great Plains Energy	\$0.99	\$25.137	3.93%
OGE Energy Corp.	\$1.02	\$36.002	2.83%
Pinnacle West Capital	\$2.40	\$56.187	4.28%
PNM Resources, Inc.	\$0.80	\$26.063	3.06%
Portland General Electric Company	\$1.19	\$33.510	3.54%
Southern Company	\$2.14	\$44.228	4.84%
TECO Energy, Inc.	\$0.90	\$17.892	5.01%
Westar Energy, Inc.	\$1.45	\$35.682	4.05%
Xcel Energy	\$1.24	\$31.367	3.96%
<b>Average</b>			<u>3.92%</u>
<b>Average without OGE and TECO</b>			3.92%

**Proposed Dividend Yield: 3.90%**

**Proposed Range of Growth: 3.50% - 4.50%**

**Estimated Proxy Cost of Common Equity: 7.40 - 8.40%**

Notes: Column 1 = Expected Annual Dividend based on weighted average of each companies 2014 fiscal year  
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 10.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.58%	4.27%	3.95%	3.63%	3.32%	3.00%	7.12%
Ameren Corp.	\$1.64	8.43%	7.53%	6.62%	5.72%	4.81%	3.91%	3.00%	8.97%
American Electric Power	\$2.12	5.18%	4.82%	4.45%	4.09%	3.73%	3.36%	3.00%	7.71%
CMS Energy Corp.	\$1.08	5.98%	5.48%	4.99%	4.49%	3.99%	3.50%	3.00%	7.45%
DTE Energy Company	\$2.76	6.29%	5.74%	5.19%	4.65%	4.10%	3.55%	3.00%	7.54%
Great Plains Energy	\$0.98	4.78%	4.48%	4.19%	3.89%	3.59%	3.30%	3.00%	7.49%
OGE Energy Corp.	\$1.00	6.47%	5.89%	5.31%	4.74%	4.16%	3.58%	3.00%	6.57%
Pinnacle West Capital	\$2.38	3.95%	3.79%	3.63%	3.48%	3.32%	3.16%	3.00%	7.63%
PNM Resources, Inc.	\$0.74	7.80%	7.00%	6.20%	5.40%	4.60%	3.80%	3.00%	6.97%
Portland General Electric	\$1.12	7.84%	7.03%	6.23%	5.42%	4.61%	3.81%	3.00%	7.66%
Southern Company	\$2.10	3.71%	3.59%	3.47%	3.36%	3.24%	3.12%	3.00%	8.11%
TECO Energy, Inc.	\$0.88	6.65%	6.04%	5.43%	4.83%	4.22%	3.61%	3.00%	9.30%
Westar Energy, Inc.	\$1.40	3.38%	3.32%	3.25%	3.19%	3.13%	3.06%	3.00%	7.14%
Xcel Energy	\$1.20	4.97%	4.64%	4.31%	3.99%	3.66%	3.33%	3.00%	7.46%
								<b>Average</b>	<b>7.65%</b>
								<b>Average without OGE and TECO</b>	<b>7.60%</b>
								<b>Average of Broad Group without Ameren and PNM for Backdating Comparison</b>	<b>7.60%</b>
								<b>Average of Refined Group without Ameren and PNM for Backdating Comparison</b>	<b>7.53%</b>

Sources: Column 1 = SNL Financial

Column 2 = Schedule 9-6

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri**  
**Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.67%	4.43%	4.20%	3.97%	3.73%	3.50%	7.51%
Ameren Corp.	\$1.64	8.43%	7.61%	6.79%	5.97%	5.14%	4.32%	3.50%	9.32%
American Electric Power	\$2.12	5.18%	4.90%	4.62%	4.34%	4.06%	3.78%	3.50%	8.09%
CMS Energy Corp.	\$1.08	5.98%	5.57%	5.15%	4.74%	4.33%	3.91%	3.50%	7.83%
DTE Energy Company	\$2.76	6.29%	5.83%	5.36%	4.90%	4.43%	3.97%	3.50%	7.92%
Great Plains Energy	\$0.98	4.78%	4.57%	4.35%	4.14%	3.93%	3.71%	3.50%	7.87%
OGE Energy Corp.	\$1.00	6.47%	5.98%	5.48%	4.99%	4.49%	4.00%	3.50%	6.98%
Pinnacle West Capital	\$2.38	3.95%	3.88%	3.80%	3.73%	3.65%	3.58%	3.50%	8.01%
PNM Resources, Inc.	\$0.74	7.80%	7.08%	6.37%	5.65%	4.93%	4.22%	3.50%	7.36%
Portland General Electric	\$1.12	7.84%	7.12%	6.39%	5.67%	4.95%	4.22%	3.50%	8.03%
Southern Company	\$2.10	3.71%	3.68%	3.64%	3.61%	3.57%	3.54%	3.50%	8.48%
TECO Energy, Inc.	\$0.88	6.65%	6.13%	5.60%	5.08%	4.55%	4.03%	3.50%	9.65%
Westar Energy, Inc.	\$1.40	3.38%	3.40%	3.42%	3.44%	3.46%	3.48%	3.50%	7.53%
Xcel Energy	\$1.20	4.97%	4.73%	4.48%	4.24%	3.99%	3.75%	3.50%	7.84%
								<b>Average</b>	<b>8.03%</b>
								<b>Average without OGE and TECO</b>	<b>7.98%</b>
								<b>Average of Broad Group without Ameren and PNM for Backdating Comparision</b>	<b>7.98%</b>
								<b>Average of Refined Group without Ameren and PNM for Backdating Comparision</b>	<b>7.91%</b>

Sources: Column 1 = SNL Financial.

Column 2 = Schedule 9-6

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.75%	4.60%	4.45%	4.30%	4.15%	4.00%	7.90%
Ameren Corp.	\$1.64	8.43%	7.69%	6.95%	6.22%	5.48%	4.74%	4.00%	9.68%
American Electric Power	\$2.12	5.18%	4.98%	4.79%	4.59%	4.39%	4.20%	4.00%	8.47%
CMS Energy Corp.	\$1.08	5.98%	5.65%	5.32%	4.99%	4.66%	4.33%	4.00%	8.22%
DTE Energy Company	\$2.76	6.29%	5.91%	5.53%	5.15%	4.76%	4.38%	4.00%	8.31%
Great Plains Energy	\$0.98	4.78%	4.65%	4.52%	4.39%	4.26%	4.13%	4.00%	8.26%
OGE Energy Corp.	\$1.00	6.47%	6.06%	5.65%	5.24%	4.82%	4.41%	4.00%	7.38%
Pinnacle West Capital	\$2.38	3.95%	3.96%	3.97%	3.98%	3.98%	3.99%	4.00%	8.39%
PNM Resources, Inc.	\$0.74	7.80%	7.17%	6.53%	5.90%	5.27%	4.63%	4.00%	7.76%
Portland General Electric	\$1.12	7.84%	7.20%	6.56%	5.92%	5.28%	4.64%	4.00%	8.42%
Southern Company	\$2.10	3.71%	3.76%	3.81%	3.86%	3.90%	3.95%	4.00%	8.85%
TECO Energy, Inc.	\$0.88	6.65%	6.21%	5.77%	5.33%	4.88%	4.44%	4.00%	9.99%
Westar Energy, Inc.	\$1.40	3.38%	3.48%	3.59%	3.69%	3.79%	3.90%	4.00%	7.92%
Xcel Energy	\$1.20	4.97%	4.81%	4.65%	4.49%	4.32%	4.16%	4.00%	8.23%
								<b>Average</b>	<b>8.41%</b>
								<b>Average without OGE and TECO</b>	<b>8.37%</b>
								<b>Average of Broad Group without Ameren and PNM for Backdating Comparison</b>	<b>8.36%</b>
								<b>Average of Refined Group without Ameren and PNM for Backdating Comparison</b>	<b>8.30%</b>

Sources: Column 1 = SNL Financial.

Column 2 = Schedule 9-6

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.82%	4.73%	4.65%	4.57%	4.48%	4.40%	8.22%
Ameren Corp.	\$1.64	8.43%	7.76%	7.09%	6.42%	5.74%	5.07%	4.40%	9.96%
American Electric Power	\$2.12	5.18%	5.05%	4.92%	4.79%	4.66%	4.53%	4.40%	8.77%
CMS Energy Corp.	\$1.08	5.98%	5.72%	5.45%	5.19%	4.93%	4.66%	4.40%	8.53%
DTE Energy Company	\$2.76	6.29%	5.98%	5.66%	5.35%	5.03%	4.72%	4.40%	8.62%
Great Plains Energy	\$0.98	4.78%	4.72%	4.65%	4.59%	4.53%	4.46%	4.40%	8.57%
OGE Energy Corp.	\$1.00	6.47%	6.13%	5.78%	5.44%	5.09%	4.75%	4.40%	7.71%
Pinnacle West Capital	\$2.38	3.95%	4.03%	4.10%	4.18%	4.25%	4.33%	4.40%	8.70%
PNM Resources, Inc.	\$0.74	7.80%	7.23%	6.67%	6.10%	5.53%	4.97%	4.40%	8.08%
Portland General Electric	\$1.12	7.84%	7.27%	6.69%	6.12%	5.55%	4.97%	4.40%	8.72%
Southern Company	\$2.10	3.71%	3.83%	3.94%	4.06%	4.17%	4.29%	4.40%	9.15%
TECO Energy, Inc.	\$0.88	6.65%	6.28%	5.90%	5.53%	5.15%	4.78%	4.40%	10.28%
Westar Energy, Inc.	\$1.40	3.38%	3.55%	3.72%	3.89%	4.06%	4.23%	4.40%	8.24%
Xcel Energy	\$1.20	4.97%	4.88%	4.78%	4.69%	4.59%	4.50%	4.40%	8.54%
								<b>Average</b>	<b>8.72%</b>
								<b>Average without OGE and TECO</b>	<b>8.67%</b>

Sources: Column 1 = SNL Financial.

Column 2 = Schedule 9-6

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

Central Region Electric Utility Proxy Group

EPS

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

Years	Dayton P & L/ DPL	Detroit Edison/ DTE	Empire	IPALCO	Kansas City P & L	Northern States Power	Okla. Gas & Electric/ OGE Energy Corp.	SJL&P	WPS Resources/ Wisconsin Public Serv.	WI Energy/ WI Electric 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%
<b>Average</b>	<b>2.73%</b>	<b>2.82%</b>	<b>2.54%</b>	<b>4.17%</b>	<b>2.23%</b>	<b>4.45%</b>	<b>2.83%</b>	<b>4.57%</b>	<b>4.30%</b>	<b>5.59%</b>	<b>3.62%</b>

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**Central Region Electric Utility Proxy Group  
DPS**

**10-Year Compound Growth Rate Averages (1968-1999)**

Years	Dayton P & L/ DPL	Detroit Edison/ DTE	Empire	IPALCO	Kansas City P & L	Northern States Power	Okla. Gas & Electric/ OGE Energy Corp.	SJL&P	WPS Resources/ Wisconsin Public Serv.	WI Energy/ WI Electric 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%
<b>Average</b>	<b>2.41%</b>	<b>1.56%</b>	<b>3.46%</b>	<b>4.08%</b>	<b>3.50%</b>	<b>5.26%</b>	<b>3.46%</b>	<b>4.43%</b>	<b>5.23%</b>	<b>6.47%</b>	<b>3.99%</b>

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**Central Region Electric Utility Proxy Group  
BVPS**

**10-Year Compound Growth Rate Averages (1968-1999)**

<b>Years</b>	<b>Dayton P &amp; L/ DPL</b>	<b>Detroit Edison/ DTE</b>	<b>Empire</b>	<b>IPALCO</b>	<b>Kansas City P &amp; L</b>	<b>Northern States Power</b>	<b>Okla. Gas &amp; Electric/ OGE Energy Corp.</b>	<b>SJL&amp;P</b>	<b>WPS Resources/ Wisconsin Public Serv.</b>	<b>WI Energy/ WI Electric Power</b>	<b>Average</b>
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%	<b>3.05%</b>
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%	<b>2.69%</b>
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%	<b>2.41%</b>
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%	<b>2.27%</b>
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%	<b>2.42%</b>
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%	<b>2.73%</b>
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%	<b>3.14%</b>
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%	<b>3.41%</b>
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%	<b>3.53%</b>
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%	<b>3.60%</b>
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%	<b>3.72%</b>
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%	<b>3.95%</b>
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%	<b>4.05%</b>
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%	<b>3.95%</b>
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%	<b>3.72%</b>
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%	<b>3.48%</b>
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%	<b>3.23%</b>
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%	<b>2.89%</b>
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%	<b>2.69%</b>
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%	<b>2.58%</b>
<b>Average</b>	<b>1.54%</b>	<b>0.60%</b>	<b>3.13%</b>	<b>4.09%</b>	<b>1.63%</b>	<b>4.83%</b>	<b>2.75%</b>	<b>3.72%</b>	<b>4.17%</b>	<b>5.30%</b>	<b>3.18%</b>



Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

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

<u>DPS</u>		<u>EPS</u>		<u>BVPS</u>		<u>Average</u>	<u>GDP</u>	
<u>Years</u>	<u>10 yr compound growth rate avgs</u>	<u>Years</u>	<u>10 yr compound growth rate avgs</u>	<u>Years</u>	<u>10 yr compound growth rate avgs</u>	<u>DPS, EPS and BVPS</u>	<u>Years</u>	<u>10 yr compound growth rate avgs</u>
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%
<b>Average</b>	<b>3.99%</b>	<b>Average</b>	<b>3.62%</b>	<b>Average</b>	<b>3.18%</b>		<b>Average</b>	<b>8.10%</b>
<b>Average of 10-year Rolling Averages EPS, DPS and BVPS</b>			<b>3.59%</b>					

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

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.58%	4.27%	3.95%	3.63%	3.32%	3.00%	7.12%
American Electric Power	\$2.12	5.18%	4.82%	4.45%	4.09%	3.73%	3.36%	3.00%	7.71%
Cleco Corp.	\$1.60	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	6.33%
Great Plains Energy	\$0.98	4.95%	4.63%	4.30%	3.98%	3.65%	3.33%	3.00%	7.54%
IDACORP, Inc.	\$1.88	4.00%	3.83%	3.67%	3.50%	3.33%	3.17%	3.00%	6.68%
Pinnacle West Capital	\$2.38	3.95%	3.79%	3.63%	3.48%	3.32%	3.16%	3.00%	7.63%
Southern Company	\$2.10	3.68%	3.57%	3.45%	3.34%	3.23%	3.11%	3.00%	8.10%
Westar Energy, Inc.	\$1.40	2.13%	2.28%	2.42%	2.57%	2.71%	2.86%	3.00%	6.82%
Wisconsin Energy	\$1.56	5.27%	4.89%	4.51%	4.14%	3.76%	3.38%	3.00%	7.15%
Xcel Energy	\$1.20	4.97%	4.64%	4.31%	3.99%	3.66%	3.33%	3.00%	7.46%
								Average	7.25%
								Average w/o Cleco and Wisconsin Energy	7.38%

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.67%	4.43%	4.20%	3.97%	3.73%	3.50%	7.51%
American Electric Power	\$2.12	5.18%	4.90%	4.62%	4.34%	4.06%	3.78%	3.50%	8.09%
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	4.95%	4.71%	4.47%	4.23%	3.98%	3.74%	3.50%	7.92%
IDACORP, Inc.	\$1.88	4.00%	3.92%	3.83%	3.75%	3.67%	3.58%	3.50%	7.08%
Pinnacle West Capital	\$2.38	3.95%	3.88%	3.80%	3.73%	3.65%	3.58%	3.50%	8.01%
Southern Company	\$2.10	3.68%	3.65%	3.62%	3.59%	3.56%	3.53%	3.50%	8.47%
Westar Energy, Inc.	\$1.40	2.13%	2.36%	2.59%	2.82%	3.04%	3.27%	3.50%	7.21%
Wisconsin Energy	\$1.56	5.27%	4.98%	4.68%	4.39%	4.09%	3.80%	3.50%	7.54%
Xcel Energy	\$1.20	4.97%	4.73%	4.48%	4.24%	3.99%	3.75%	3.50%	7.84%
								Average	7.64%
								Average w/o Cleco and Wisconsin Energy	7.77%

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

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

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of Equity
Alliant Energy	\$2.04	4.90%	4.75%	4.60%	4.45%	4.30%	4.15%	4.00%	7.90%
American Electric Power	\$2.12	5.18%	4.98%	4.79%	4.59%	4.39%	4.20%	4.00%	8.47%
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	4.95%	4.79%	4.63%	4.48%	4.32%	4.16%	4.00%	8.30%
IDACORP, Inc.	\$1.88	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	7.48%
Pinnacle West Capital	\$2.38	3.95%	3.96%	3.97%	3.98%	3.98%	3.99%	4.00%	8.39%
Southern Company	\$2.10	3.68%	3.73%	3.79%	3.84%	3.89%	3.95%	4.00%	8.84%
Westar Energy, Inc.	\$1.40	2.13%	2.44%	2.75%	3.07%	3.38%	3.69%	4.00%	7.61%
Wisconsin Energy	\$1.56	5.27%	5.06%	4.85%	4.64%	4.42%	4.21%	4.00%	7.93%
Xcel Energy	\$1.20	4.97%	4.81%	4.65%	4.49%	4.32%	4.16%	4.00%	8.23%
								Average	8.03%
								Average w/o Cleco and Wisconsin Energy	8.15%

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of 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%	2.56%	2.03%	1.50%	0.97%	0.44%	3.00%	8.38%
CMS Energy Corp.	\$0.96	5.90%	5.37%	4.84%	4.31%	3.78%	3.25%	3.00%	8.33%
DTE Energy Company	\$2.35	4.38%	3.85%	3.32%	2.79%	2.26%	1.73%	3.00%	7.90%
Great Plains Energy	\$0.85	7.63%	7.10%	6.57%	6.04%	5.51%	4.98%	3.00%	8.66%
OGE Energy Corp.	\$0.79	5.87%	5.34%	4.81%	4.28%	3.75%	3.22%	3.00%	6.69%
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%	3.82%	3.29%	2.76%	2.23%	1.70%	3.00%	7.89%
Southern Company	\$1.89	5.33%	4.80%	4.27%	3.74%	3.21%	2.68%	3.00%	8.06%
TECO Energy, Inc.	\$0.88	5.20%	4.67%	4.14%	3.61%	3.08%	2.55%	3.00%	8.97%
Westar Energy, Inc.	\$1.32	5.75%	5.22%	4.69%	4.16%	3.63%	3.10%	3.00%	8.81%
Xcel Energy	\$1.04	4.65%	4.12%	3.59%	3.06%	2.53%	2.00%	3.00%	7.59%
								<b>Average</b>	<b>8.16%</b>
								<b>Average without OGE and TECO</b>	<b>8.23%</b>

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of 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%
								<b>Average</b>	<b>8.47%</b>
								<b>Average without OGE and TECO</b>	<b>8.53%</b>

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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)
Company Name	Annualized Quarterly Dividend	Growth Years 1-5	6	7	Growth Years 8	9	10	Growth in Perpetuity	Cost of 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%
								<b>Average</b>	<b>8.84%</b>
								<b>Average without OGE and TECO</b>	<b>8.90%</b>

Sources: Column 1 = SNL Financial

Column 8 = See range of averages from Schedules 13-1 through Schedule 13-4.

**Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258**

**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 Average Market Risk Premium (1926-2013)	Geometric Average Market Risk Premium (1926-2013)	Arithmetic CAPM Cost of Common Equity (1926-2013)	Geometric CAPM Cost of Common Equity (1926-2013)
Company Name	Risk Free Rate	Beta				
Alliant Energy	3.17%	0.78	6.20%	4.64%	8.00%	6.78%
Ameren Corp.	3.17%	0.75	6.20%	4.64%	7.79%	6.62%
American Electric Power	3.17%	0.75	6.20%	4.64%	7.79%	6.62%
CMS Energy Corp.	3.17%	0.70	6.20%	4.64%	7.50%	6.41%
DTE Energy Company	3.17%	0.69	6.20%	4.64%	7.46%	6.38%
Great Plains Energy	3.17%	0.81	6.20%	4.64%	8.20%	6.94%
OGE Energy Corp.	3.17%	0.87	6.20%	4.64%	8.54%	7.18%
Pinnacle West Capital	3.17%	0.71	6.20%	4.64%	7.58%	6.47%
PNM Resources, Inc.	3.17%	0.82	6.20%	4.64%	8.24%	6.97%
Portland General Electric Co.	3.17%	0.77	6.20%	4.64%	7.91%	6.72%
Southern Company	3.17%	0.55	6.20%	4.64%	6.58%	5.72%
TECO Energy Inc.	3.17%	0.81	6.20%	4.64%	8.16%	6.90%
Westar Energy, Inc.	3.17%	0.72	6.20%	4.64%	7.62%	6.50%
Xcel Energy	3.17%	0.66	6.20%	4.64%	7.29%	6.25%
<b>Average</b>		<u>0.74</u>			<u>7.76%</u>	<u>6.60%</u>
<b>Average without OGE and TECO</b>		<u>0.73</u>			<u>7.66%</u>	<u>6.53%</u>

Column 1 = The appropriate yield is equal to the average 30-year U.S. Treasury Bond yield for August, September and October 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 invest a 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.

$$R_A = R_f + (\sigma^2/2)$$

$R_A$  = Arithmetic Return Average

$R_g$  = Geometric Return Average

$\sigma$  = standard deviation of equity returns

Column 5 = (Column 1 + (Column 2 \* Column 3)),

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



Union Electric Company d/b/a Ameren Missouri  
Case No. ER-2014-0258

**Recommended Allowed Rate of Return as of March 31, 2014  
for Union Electric Company**

Allowed Rate of Return Using  
Common Equity Return of:

Capital Component	Percentage of Capital	Embedded Cost	9.00%	<b>9.25%</b>	9.50%
Common Stock Equity	52.96%	---	4.77%	<b>4.90%</b>	5.03%
Preferred Stock	1.12%	4.180%	0.05%	<b>0.05%</b>	0.05%
Long-Term Debt	<u>45.92%</u>	5.565%	<u>2.56%</u>	<b><u>2.56%</u></b>	<u>2.56%</u>
Total	<b><u>100.00%</u></b>		<b><u>7.37%</u></b>	<b><u>7.50%</u></b>	<u>7.63%</u>

Notes:

See Schedule 5 for the Capital Structure Ratios.

Union Electric Provided Embedded Cost of Long-Term Debt and Embedded Cost of Preferred Stock in Ryan Martin's Direct Testimony.