Exhibit No.:

Issue: Rate-of-Return Witness: Matthew J. Barnes

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony

Case No.: ER-2008-0093

Date Testimony Prepared: April 04, 2008

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

#### REBUTTAL TESTIMONY

**OF** 

**MATTHEW J. BARNES** 

#### THE EMPIRE DISTRICT ELECTRIC COMPANY

**CASE NO. ER-2008-0093** 

Jefferson City, Missouri April 2008

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1		REBUTTAL TESTIMONY
2		OF
3		MATTHEW J. BARNES
4		THE EMPIRE DISTRICT ELECTRIC COMPANY
5		CASE NO. ER-2008-0093
6	Q.	Please state your name.
7	A.	My name is Matthew J. Barnes.
8	Q.	Are you the same Matthew J. Barnes who has previously contributed to the
9	rate-of-returi	n portion of the Staff Cost of Service Report (Staff Report) filed in this
10	proceeding b	by the Staff of the Missouri Public Service Commission (Staff)?
11	A.	Yes, I am. The Staff Report was filed on February 22, 2008.
12	Q.	In the Staff Report, did you recommend a fair and reasonable rate-of-return on
13	the Missouri	jurisdictional electric utility rate base for The Empire District Electric Company
14	(Empire or C	Company)?
15	A.	Yes, I did.
16	Q.	What is the purpose of your rebuttal testimony?
17	A.	The purpose of my rebuttal testimony is to respond to the direct testimony of
18	Dr. James I	H. Vander Weide. Dr. Vander Weide sponsored rate-of-return testimony on
19	behalf of Em	apire.
20	EXECUTIV	<u>YE SUMMARY</u>
21	Q.	Please summarize your rebuttal testimony.
22	A.	I will address the inconsistencies in Dr. Vander Weide's methodology in this
23	proceeding	compared to previous methodologies in Empire's last proceedings in

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- Case No. ER-2006-0315, Case No. ER-2004-0570 and AmerenUE Case No. ER-2007-0002.
- 2 I will also present Staff's corrected rate-of-return recommendation for Empire and the results
- 3 of a company-specific discounted cash flow model (DCF).

#### CORRECTIONS

- Do you have any corrections to make to Staff's recommended rate-of-return Q. for Empire?
- A. Yes. Due to a calculation error in Column 3 of Schedule 17 of the Staff Report, Staff's calculation of Empire's dividend yield increased to 4.04 percent from 3.73 percent. This in turn increased Staff's return on equity and rate-of-return recommendation for Empire. Staff now recommends a return on equity in the range of 9.70 percent to 10.85 percent, with a mid-point of 10.28 percent. Staff's rate-of-return for Empire is now in the range of 8.37 percent to 8.95 percent, with a mid-point of 8.66 percent.
- Q. Staff did not previously provide a company-specific return on equity for Empire in the Staff Report due to a misprint in Standard & Poor's (S&P) Earnings Guide and the Institutional Brokers Estimate System (I/B/E/S) publications for January 2008. Has Staff received the correct information?
- Yes. Staff updated Schedule 15, Schedule 16, and Schedule 17 of the Staff A. Report and attached them to this testimony. Staff notes that S&P no longer publishes the Earnings Guide, which contained information on analysts' projected 5-year earnings per share growth rate Staff used in estimating the cost of common equity for Empire. Therefore, Staff eliminated S&P from the estimated growth rates.
- Q. What are the company-specific results using historical and projected growth rates?

No, he did not.

A.

- Q. Has Dr. Vander Weide made any upward adjustments to his cost of common equity for alleged higher levels of financial risk in previous cases before the Missouri Public Service Commission (Commission)?
- A. Yes. Dr. Vander Weide made upward adjustments to his cost of common equity recommendations in the previous Empire proceedings in Case No. ER-2006-0315 and Case No. ER-2004-0570, as well as the previous AmerenUE proceeding in Case No. ER-2007-0002.
- Q. Why did Dr. Vander Weide not make an upward adjustment to his cost of common equity in this case as he consistently did in previous cases?
- A. Beginning on page 42, line 1 through line 19 of his direct testimony, Dr. Vander Weide testifies to the following question and answer:
  - Q. You noted earlier that the cost of equity depends on a company's capital structure. Is there any way to adjust the 11.6 percent cost of equity for your proxy companies to reflect the higher financial risk embodied in Empire's rate making capital structure in this proceeding?
  - A. Yes. Since my proxy companies are a conservative proxy for the risk of investing in Empire, Empire should have a weighted average cost of capital that is equal to or greater than the weighted average cost of capital for my proxy companies. It is a simple matter to determine what cost of equity Empire should have in order to satisfy this condition. Since Empire's ratemaking capital structure contains significantly more leverage than the average capital structure of my proxy companies, and the cost of equity increases with leverage, it is evident that such an adjustment would produce a significantly higher cost of equity for Empire.
  - Q. Have you made such an adjustment?
  - A. No. Since the Commission did not accept a financial risk adjustment in its recent AmerenUE decision, Empire has requested that I not make a financial risk adjustment in this proceeding [Emphasis Added].

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- And could you explain to me why you recently changed your methodology for determining ROE and you just recently started performing this leverage adjustment that you just
- Because I didn't believe that just looking at the results of DCF and CAB[P]-M and risk premium model would allow that companies to attract capital in the marketplace, because the marketplace looks at current interest rates and market value capital structures. Applying cost of DCF models and risk premium models and CAP-M models to the company's book value capital structures will be insufficient to allow the companies to attract capital in the marketplace.
- So for the previous 30 years when you weren't utilizing O. this leverage adjustment, you were doing it incorrectly?
- Α I was doing it partially. I was correctly applying the DCF. premium correctly applying the risk was CAP-M. I did not take the final test, which I believe is necessary to allow the company to attract capital in the marketplace. I don't believe it's incorrect. It just wasn't complete.

- Q. So for 30 years you thought it was appropriate to recommend an incomplete DCF recommendation to public utility commissions?
- A. I viewed my assignment in those during that time as providing the results of cost-of-equity models, such as the DCF and the CAP-M and risk premium. I did not view my assignment as taking the further step of recommending the rate-of-return that would allow a company to truly attract capital in the marketplace. I knew that it was incomplete, but I didn't view my assignment at taking that additional step.
- Q. And when did your assignment change?
- A. In the testimonies that I cited.
- Q. And why did your assignment change?
- A. Because I informed the companies that I was working with that if we did things in the way we always have, they would not be able to attract capital in the workplace, and they agreed that I ought to take the additional step to make sure they could attract capital in the marketplace.
- Q. So if the Commission if the Missouri Public Service Commission accepts your method, are you guarantying to the company that they'll be able to attract capital in the marketplace?
- A. One can never guarantee the future, because the future is unknown, but I can guarantee that they'll have and one also doesn't know what the other elements are in a rate process, like the operating expenses and fuel adjustment clauses and so on.

But I am saying, with regard to the cost-of-capital itself, it would have the opportunity to attract capital in the marketplace. Whereas, if one doesn't take this final step, then with regard to the cost-of-capital components themselves, we would know in advance they wouldn't even have an opportunity to attract capital in the marketplace.

- Q. Does Dr. Vander Weide explain why he suddenly decided not to make an upward adjustment in this case which according to his testimony in the deposition cited above is critical to be able to attract capital?
- A. Yes, he says the Company requested him not to make an upward adjustment because the Commission did not accept an upward adjustment in the Report and Order in AmerenUE rate case, Case No. ER-2007-0002.
- Q. Did the Commission discuss the credibility of Dr. Vander Weide in the Report and Order in AmerenUE Case No. ER-2007-0002?
- A. Yes. The Commission discussed Dr. Vander Weide's credibility on Page 41 of the Report and Order for AmerenUE issued May 22, 2007 in Case No. ER-2007-0002. The Commission said:

In sum, the financial risk upward adjustment proposed by AmerenUE's witnesses appears to be a transparent effort to inflate the company's proposed return on equity to obtain a better bargaining position in the hope the Commission would simply split the difference between the extreme positions. Such efforts call into question the credibility of these witnesses [Emphasis Added]. Indeed, Vander Weide came close to acknowledging that his proposed return on equity was extreme when at the hearing he indicated an eleven percent return on equity, in line with the amounts that the Commission has allowed Kansas City Power & Light and The Empire District Electric Company in recent rate cases, "would be a benchmark that the financial community would look at."

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- Q. Are there any other inconsistencies with Dr. Vander Weide's testimony?
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- A. Yes. Dr. Vander Weide did not use natural gas companies in his proxy group as he did in the last Empire rate case, and he does not explain why he changed his
  - Q. Dr. Vander Weide uses the quarterly compounding version of the DCF model
- to estimate the return on equity for Empire. Does Value Line, a widely recognized and used
- investor information source, provide quarterly projected compounded dividends for the next
- year?

methodology.

- A. No, Value Line publishes the projected dividend on an annual basis. This
- information is used by investors for determining the prices they are willing to pay for stocks.
  - Because Staff's estimated cost of equity for Missouri regulated utilities is based on Staff's
  - analysis of investor expectations, Staff believes it is important to replicate how it believes
- investors would estimate an expected dividend yield. Value Line does not publish projected
  - quarterly dividends; therefore, Staff can not imagine that investors employ such precision to
  - estimate the cost of common equity for Empire. If the projected quarterly compounding
  - version of the DCF model is important to an investor, Staff believes that Value Line would
  - publish this information. In Staff's opinion, it appears that Dr. Vander Weide uses this
  - methodology to arrive at a higher dividend yield that results in a higher return on equity
  - recommendation for Empire's revenue requirement determination.
    - O. The Commission has cited in recent Report and Orders a "Zone Of
  - Reasonableness", or ZOR, that is based on the Regulatory Research Association's national
- 22 average authorized ROE's and adding 100 basis points above and below the average to

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- Case No. ER-2007-0002. It appears that Dr. Vander Weide is recommending a return on equity that is convenient for Empire.
- 2. My cost of common equity of 9.70 percent to 10.85 percent with a mid-point of 10.28 percent would produce a fair and reasonable rate-of -return of 8.37 percent to 8.95 percent with a mid-point of 8.66 percent for Empire.
- Q. Does this conclude your rebuttal testimony?
- A. Yes, it does.

### BEFORE THE PUBLIC SERVICE COMMISSION

### **OF THE STATE OF MISSOURI**

In the Matter of The Emp					
Company of Joplin, Misso	* *				
Authority to File Tariffs	_		Case N	No. ER-2008-009	3
Electric Service Provided		the )			
Missouri Service Area of the	ne Company .	)			•
				•	
	AFFIDAVIT OF	MATTHEW	J. BARNES		
STATE OF MISSOURI	)				
CO171771 07 001	) ss.		•	• •	
COUNTY OF COLE	)			• •	
			•		
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# REVISED - SCHEDULE 15

## The Empire District Electric Company Case No. ER-2008-0093

#### Historical and Projected Growth Rates for the Comparable Electric Utility Companies and The Empire District Electric Company

	(1)	(2)	(3)	(4)	(5)	(6)
		Projected				
	Historical	5-Year	Projected	Projected		Average of
	Growth Rate	<b>EPS</b> Growth	5-Year	3-5 Year	Average	Historical
	(DPS, EPS and	IBES	<b>EPS</b> Growth	<b>EPS</b> Growth	Projected	& Projected
Company Name	BVPS)	(Mean)	S&P	Value Line	Growth	Growth
Alliant Energy	-3.83%	6.00%	6.00%	5.50%	5.83%	1.00%
Ameren Corp.	1.17%	7.30%	6.00%	3.00%	5.43%	3.30%
American Electric Power	-2.50%	6.02%	6.00%	6.50%	6.17%	1.84%
Cleco Corp.	2.83%	14.00%	14.00%	6.50%	11.50%	7.17%
DPL Inc.	0.17%	8.88%	9.00%	10.50%	9.46%	4.81%
Entergy Corp.	6.42%	10.60%	11.00%	9.50%	10.37%	8.39%
FirstEnergy Corp.	4.00%	11.00%	9.00%	9.00%	9.67%	6.83%
FPL Group	5.50%	9.90%	10.00%	11.00%	10.30%	7.90%
Hawaiian Electric	0.58%	8.53%	9.00%	1.50%	6.34%	3.46%
IDACORP, Inc.	-2.67%	6.00%	6.00%	2.00%	4.67%	1.00%
NSTAR	3.25%	6.50%	7.00%	8.50%	7.33%	5.29%
Pinnacle West Capital	3.17%	5.73%	6.00%	1.50%	4.41%	3.79%
PNM Resources	3.25%	9.13%	9.00%	2.50%	6.88%	5.06%
Progress Energy	2.92%	5.04%	5.00%	3.50%	4.51%	3.72%
Southern Company	1.92%	5.03%	5.00%	3.00%	4.34%	3.13%
Westar Energy	-2.67%	5.58%	6.00%	4.50%	5.36%	1.35%
Average	1.47%	7.83%	7.75%	5.53%	7.04%	4.25%
The Empire District Electric Company	0.50%	6.00%	*	8.50%	7.25%	3.88%

Proposed Range of Growth for Comparables:

5.55%-6.70%

Column 5 = [(Column 2 + Column 3 + Column 4) / 3]

Column 6 = [(Column 1 + Column 5)/2]

Sources: Column 1 = Average of 10-Year and 5-Year Annual Compound Growth Rates from Schedule 13-3.

Column 2 = I/B/E/S Inc.'s Institutional Brokers Estimate System, March 20, 2008.

Column 3 = Standard & Poor's Earnings Guide, January 2008.

Column 4 = The Value Line Investment Survey: Ratings and Reports, November 30, December 28, 2007 and February 8, 2008.

<sup>\*</sup>As of January 1, 2008 S&P no longer publishes the Earning Guide that listed the projected 5-year EPS growth rate for companies.

# The Empire District Electric Company Case No. ER-2008-0093

# Average High / Low Stock Price for September 2007 through December 2007 for the Comparable Electric Utility Companies and The Empire District Electric Company

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Septeml	per 2007	Octobe	er 2007	Novemb	per 2007	Decemb	per 2007	Average
	High	Low	Uiah	Low	High	Low	Uiah	Low	High/Low Stock
	High Stock	Stock	High Stock	Stock	High Stock	Stock	High Stock	Stock	Price
Company Nama	Price	(09/07 - 12/07)							
Company Name Alliant Energy	\$39.030	\$36.610	\$40.570	\$37.320	\$42.000	\$38.880	\$43.410	\$40.690	\$39.814
23	\$59.030 \$53.890	\$50.010	\$40.370 \$54.400	\$57.320 \$51.810	\$42.000 \$54.200	\$56.880 \$51.960	\$43.410 \$54.740	\$40.690 \$52.840	\$59.814 \$53.011
American Electric Power		\$30.230 \$44.060		\$31.810 \$45.050		*			*
	\$46.970	\$22.410	\$48.700	\$43.030 \$24.500	\$48.230 \$29.840	\$45.360 \$25.090	\$49.490	\$46.320 \$24.600	\$46.773 \$25.999
Cleco Corp. DPL Inc.	\$26.030 \$26.820	\$22.410	\$26.760		\$29.840	\$23.090	\$28.760	\$24.000	\$25.999 \$28.366
	*		\$29.040	\$25.710	*		\$31.000	*	•
Entergy Corp.	\$111.950	\$102.120	\$120.890	\$108.210	\$125.000	\$114.040	\$123.390	\$114.740	\$115.043
FirstEnergy Corp.	\$66.180	\$61.080	\$69.920	\$63.390	\$69.760	\$66.310	\$74.980	\$68.100	\$67.465
FPL Group	\$63.490	\$58.230	\$68.480	\$60.260	\$70.140	\$65.530	\$72.770	\$67.520	\$65.803
Hawaiian Electric	\$21.870	\$20.620	\$23.200	\$21.680	\$23.490	\$20.920	\$23.950	\$22.600	\$22.291
IDACORP, Inc.	\$33.900	\$31.200	\$36.450	\$32.360	\$35.740	\$33.000	\$36.720	\$33.680	\$34.131
NSTAR	\$35.050	\$32.450	\$35.440	\$33.450	\$35.620	\$33.590	\$37.000	\$34.860	\$34.683
Pinnacle West Capital	\$40.700	\$39.480	\$42.620	\$39.500	\$43.640	\$39.040	\$44.500	\$42.000	\$41.435
PNM Resources	\$23.620	\$21.190	\$25.210	\$23.050	\$25.060	\$21.710	\$23.950	\$21.410	\$23.150
Progress Energy	\$48.160	\$44.960	\$48.000	\$44.750	\$49.060	\$46.310	\$50.250	\$48.250	\$47.468
Southern Company	\$37.480	\$35.040	\$37.230	\$35.160	\$38.750	\$35.150	\$39.350	\$37.360	\$36.940
Westar Energy	\$25.430	\$23.500	\$26.750	\$24.290	\$26.760	\$24.770	\$26.830	\$25.280	\$25.451
	Novemb	per 2007	Decemb	ber 2007	Januar	y 2008	Februar	ry 2008	
The Empire District Electric Company	\$24.340	\$22.690	\$23.500	\$22.260	\$23.290	\$21.180	\$23.020	\$20.370	\$22.877

Notes:

Column 9 = [ (Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 + Column 7 + Column 8) / 8].

Sources: S & P Stock Guides: October 2007, November 2007, December 2007, January 2008, February 2008, and March 2008.

# The Empire District Electric Company Case No. ER-2008-0093

#### Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable Electric Utility Companies and The Empire District Electric Company

	(1)	(2)	(3)	(4)	(5)
		Average		Average of	Estimated
	Expected	High/Low	Projected	Historical	Cost of
	Annual	Stock	Dividend	& Projected	Common
Company Name	Dividend	Price	Yield	Growth	Equity
Alliant Energy	\$1.40	\$39.814	3.52%	1.00%	4.52%
Ameren Corp.	\$2.54	\$53.011	4.79%	3.30%	8.09%
American Electric Power	\$1.67	\$46.773	3.57%	1.84%	5.41%
Cleco Corp.	\$0.90	\$25.999	3.46%	7.17%	10.63%
DPL Inc.	\$1.10	\$28.366	3.88%	4.81%	8.69%
Entergy Corp.	\$3.10	\$115.043	2.69%	8.39%	11.09%
FirstEnergy Corp.	\$2.15	\$67.465	3.19%	6.83%	10.02%
FPL Group	\$1.78	\$65.803	2.71%	7.90%	10.61%
Hawaiian Electric	\$1.24	\$22.291	5.56%	3.46%	9.03%
IDACORP, Inc.	\$1.20	\$34.131	3.52%	1.00%	4.52%
NSTAR	\$1.43	\$34.683	4.12%	5.29%	9.41%
Pinnacle West Capital	\$2.12	\$41.435	5.12%	3.79%	8.90%
PNM Resources	\$0.97	\$23.150	4.19%	5.06%	9.25%
Progress Energy	\$2.47	\$47.468	5.20%	3.72%	8.92%
Southern Company	\$1.66	\$36.940	4.49%	3.13%	7.62%
Westar Energy	\$1.16	\$25.451	4.56%	1.35%	5.90%
Average			4.04%	4.25%	8.29%
The Empire District Electric Company	\$1.28	\$22.877	5.60%	3.88% *	9.47%

Proposed Dividend Yield: 4.04%

Proposed Range of Growth: 5.55% - 6.70%

Estimated Proxy Cost of Common Equity: 9.59%-10.74%

**Empire Company-Specific Using** 

Average Projected Growth 12.85%

Notes: Column 1 = Estimated Dividends Declared per share represents the projected dividend for 2008.

Column 3 = (Column 1 / Column 2).

Column 5 = (Column 3 + Column 4).

Sources: Column 1 = The Value Line Investment Survey: Ratings & Reports, November 30, December 28, 2007 and February 08, 2008

Column 2 =Schedule 15.

Column 4 = Schedule 14.