

Exhibit No.:	504
Witness:	Michael Gorman
Type of Exhibit:	Rebuttal Testimony
Issues:	Rate of Return
Sponsoring Parties:	Enbridge Energy, LP Explorer Pipeline Company General Mills Praxair, Inc. Wal-Mart Stores, Inc.
Case No.:	ER-2008-0093

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of The Empire District)	
Electric Company of Joplin, Missouri)	
for Authority to File Tariffs Increasing)	Case No. ER-2008-0093
Rates for Electric Service Provided to)	
Customers in the Missouri Service)	
Area of the Company)	

Rebuttal Testimony and Schedules of

Michael Gorman

On behalf of

**Enbridge Energy, LP
Explorer Pipeline Company
General Mills
Praxair, Inc.
Wal-Mart Stores, Inc.**

April 4, 2008



BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Project 8875

*Industrial
Interviewers*

Exhibit No. 504
Case No(s). ER-2008-0093
Date 5-12-08 Rptr XF

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI


In the Matter of The Empire District)	
Electric Company of Joplin, Missouri)	
for Authority to File Tariffs Increasing)	Case No. ER-2008-0093
Rates for Electric Service Provided to)	
Customers in the Missouri Service)	
Area of the Company)	

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

Affidavit of Michael Gorman

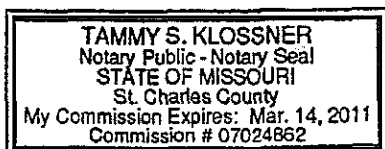
Michael Gorman, being first duly sworn, on his oath states:

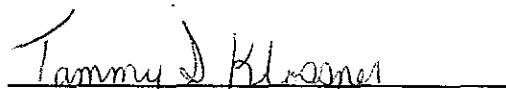
1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by Enbridge Energy, LP; Explorer Pipeline Company; General Mills; Praxair, Inc. and Wal-Mart Stores, Inc. in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes are my rebuttal testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2008-0093.
3. I hereby swear and affirm that the testimony and schedules are true and correct and that they show the matters and things that they purport to show.



Michael Gorman

Subscribed and sworn to before me this 4th day of April, 2008.





Notary Public

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of The Empire District)	
Electric Company of Joplin, Missouri)	
for Authority to File Tariffs Increasing)	Case No. ER-2008-0093
Rates for Electric Service Provided to)	
Customers in the Missouri Service)	
Area of the Company)	

Rebuttal Testimony of Michael Gorman

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

2 **A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway,**
3 **Suite 208, St. Louis, MO 63141-2000.**

4 **Q ARE YOU THE SAME MICHAEL GORMAN THAT FILED DIRECT TESTIMONY IN**
5 **THIS PROCEEDING?**

6 **A Yes.**

7 **Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

8 **A The purpose of my rebuttal testimony is to respond to Empire's witness Dr. James H.**
9 **Vander Weide and his recommended return on equity.**

10 **Q WHAT RETURN ON EQUITY DID DR. VANDER WEIDE ESTIMATE FOR EMPIRE?**

11 **A Dr. Vander Weide estimated Empire's return on equity to be 11.6%.**

**Michael Gorman
Page 1**

1 **Q HOW DID DR. VANDER WEIDE ESTIMATE EMPIRE'S RETURN ON EQUITY TO**
2 **BE 11.6%?**

3 A Dr. Vander Weide supports his return on equity based on a discounted cash flow
4 analysis, ex-ante and ex-post risk premium analyses, and a capital asset pricing
5 model analysis. Dr. Vander Weide applies these models to a proxy group of electric
6 companies to develop his return estimates.

7 **Q DO YOU BELIEVE DR. VANDER WEIDE'S ESTIMATED RETURN ON EQUITY OF**
8 **11.6% IS REASONABLE?**

9 A No. I demonstrate below, using his own rate of return methodologies, that Dr. Vander
10 Weide's 11.6% return is excessive. I also show that Dr. Vander Weide's proxy group
11 has a market cost of common equity within the range of 9.5% to 10.5%, with a
12 midpoint of 10.0%. This return estimate is based on my cost of equity methodologies
13 applied to Dr. Vander Weide's proxy risk group.

14 **Q WOULD YOU SUMMARIZE YOUR CONCERNS WITH DR. VANDER WEIDE'S**
15 **RETURN ON EQUITY ANALYSES?**

16 A Yes.

17 DCF Analysis: First, Dr. Vander Weide's DCF analysis relies upon a market
18 weighted dividend yield and growth rate from his 37 proxy companies, rather than a
19 simple average. This reliance on market weighting places greater emphasis on
20 certain companies within his proxy group. Second, Dr. Vander Weide's growth rate
21 for his proxy group exceeds the projected growth in gross domestic product.
22 Academic and economic research has shown that a constant growth DCF that relies
23 on a growth rate that exceeds GDP growth is inherently flawed. By overstating the
24 growth rate, Dr. Vander Weide has overstated his return estimate. Third, Dr. Vander

Michael Gorman
Page 2

1 Weide inappropriately relies on the quarterly version of the DCF model. These
2 criticisms of Dr. Vander Weide's DCF analysis are more thoroughly addressed below,
3 at pages 4-7.

4 Ex-Ante Risk Premium: Dr. Vander Weide's ex-ante risk premium analysis
5 relies upon a quarterly version of the DCF analysis conducted on a proxy group of
6 electric companies. When compared to the yield for "A" rated utility bonds,
7 Dr. Vander Weide is able to calculate his risk premium. Since it relies on the
8 quarterly version of the DCF, Dr. Vander Weide's risk premium analysis suffers from
9 many of the same flaws as his DCF analysis. Second, by relying on his quarterly
10 DCF, Dr. Vander Weide suggests a return on equity for his proxy group that is
11 significantly inflated compared to authorized returns on equity found reasonable by
12 public utility commissions. These criticisms of the ex-ante risk premium are
13 discussed below, at pages 7-10.

14 Ex-Post Risk Premium: In his ex-post risk premium analysis, Dr. Vander
15 Weide calculates his risk premium based upon a comparison of the achieved return
16 for the S&P 500 to the yield on "A" rated utility bonds. As explained below, at pages
17 10-11, the achieved return is not an appropriate risk proxy for Empire. In fact, Empire
18 is recognized to have a lower risk than the overall market and, therefore, a lower risk
19 premium than the market.

20 CAPM: As reflected below, at pages 12-17, Dr. Vander Weide's CAPM
21 analysis is based upon an inflated market risk premium and outdated beta
22 coefficients and risk-free rate projections. An update to these factors will result in a
23 lower return estimate.

24 Proxy Group: As discussed below, Dr. Vander Weide's proxy group does not
25 support his recommended return on equity for Empire. My cost of equity model

1 applied to Dr. Vander Weide's proxy group supports a return on equity of 10.0%, as
2 discussed at pages 17-19, below.

3 **Dr. Vander Weide's Return Analyses**

4 **Q IS DR. VANDER WEIDE'S CURRENT RETURN ON EQUITY OF 11.6%**
5 **REASONABLE?**

6 **A** No. Dr. Vander Weide's 11.6% return on equity is excessive. His return on equity
7 results are shown below in Table 1, Column 1. In Column 2, I show my adjustments
8 to Dr. Vander Weide's analyses, which reduce his equity return from 11.6% to 9.9%.
9 Hence, as set forth below, with reasonable corrections, Dr. Vander Weide's own
10 analyses support my recommended return on equity for Empire.

TABLE 1		
<u>Dr. Vander Weide's Return on Common Equity Summary</u>		
<u>Description</u>	<u>Dr. Vander Weide's Return</u>	<u>Adjusted Results</u>
	(1)	(2)
DCF	11.3%	9.0%
Risk Premium	11.0%	10.4%
CAPM	<u>12.5%</u>	<u>10.3%</u>
Average	11.6%	9.9%
Source: Vander Weide Direct at 4.		

11 **Discounted Cash Flow (DCF) Analysis**

12 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S DCF ANALYSES.**

13 **A** As shown on his Schedule JVW-1, Dr. Vander Weide performed a DCF analysis on a
14 broad-based group of electric companies. As shown on my Schedule MPG-1,

1 page 1, Dr. Vander Weide's electric proxy group DCF was based on an adjusted
2 dividend yield of 3.43% and a market weighted average growth rate of 7.84%. Dr.
3 Vander Weide proposed a market weighted average DCF return of 11.3%. However,
4 a simple average DCF return on this proxy group is 10.7%.

5 **Q IS DR. VANDER WEIDE'S DCF RETURN A REASONABLE ESTIMATE OF**
6 **EMPIRE'S COST OF EQUITY?**

7 **A** No. Dr. Vander Weide's DCF return estimate should be rejected for the following
8 reasons. First, the average proxy growth rate used to develop his DCF estimate is
9 excessive. A DCF analysis requires a growth rate that reasonably reflects long-term
10 sustainable growth. The electric proxy group average growth rate of 6.89% is not a
11 reasonable estimate of long-term sustainable growth.

12 Second, Dr. Vander Weide's proxy group average estimate is based on the
13 market weight, rather than the simple average. By applying the market weight, he is
14 giving inordinately high weight to certain company DCF estimates based on their
15 market value. There is no legitimate basis for giving more weight to DCF results
16 derived from large companies. Adjusting his return estimate to the simple average,
17 rather than the market weighted average, lowers his DCF return to 10.7% from 11.3%
18 (Schedule MPG-1, page 1).

19 Finally, Dr. Vander Weide used the quarterly version of the DCF model to
20 estimate a market required return. A quarterly DCF model reflects the reinvestment
21 of dividend returns throughout the year. The flaw in the quarterly version of the DCF
22 model is that it allows investors to earn the reinvestment return on dividends twice.
23 Specifically, they earn it a first time by increasing the authorized return on equity used
24 to set the utility's rates. This increases the utility's earnings and dividends if the
25 payout ratio does not change. Second, the investors can earn the dividend

1 reinvestment return a second time themselves after the utility pays dividends and the
2 investors reinvest those dividends in other securities of corresponding risk. Hence,
3 use of a quarterly version of the DCF return to estimate a regulatory authorized return
4 allows investors to earn the reinvestment return on dividends twice – once through
5 the regulatory authorized return on equity, and a second time after the dividends are
6 actually paid to investors and reinvested by investors.

7 **Q WHY DO YOU BELIEVE THAT DR. VANDER WEIDE'S ELECTRIC GROUP**
8 **AVERAGE GROWTH RATE EXCEEDS A REASONABLE ESTIMATE OF A LONG-**
9 **TERM SUSTAINABLE GROWTH AND THUS HAS OVERSTATED THE DCF**
10 **RESULTS?**

11 A Dr. Vander Weide's group average growth rate for his proxy group is 6.89%. As
12 discussed in my direct testimony, a long-term sustainable growth rate cannot exceed
13 the nominal projected growth in the GDP. The projected nominal GDP growth over
14 the next five and ten years is approximately 5.0% and 4.8%, respectively. Because
15 Dr. Vander Weide's group average growth rate exceeds a reasonable and rational
16 estimate of the utilities' long-term sustainable growth rates, his DCF return is inflated,
17 and not reliable. Therefore, his DCF return should be rejected.

18 As discussed in my direct testimony, academic and economic research
19 practitioners have found that long-term growth in earnings and dividends have not
20 exceeded the nominal growth in GDP. A constant growth DCF model that is based
21 on growth much higher than GDP is flawed.

1 **Q CAN DR. VANDER WEIDE'S DCF BE ADJUSTED TO REASONABLY REFLECT**
2 **LONG-TERM SUSTAINABLE GROWTH?**

3 A Yes. Considering the current market and industry perspective, the best way to reflect
4 the abnormally high short-term growth is to apply a two-stage DCF model. As I
5 discussed in my direct testimony, a two-stage growth can capture the rational
6 expectation of abnormally high growth experienced in the next three to five years,
7 followed by a more normalized long-term sustainable growth thereafter. This
8 two-stage analysis would be based on Dr. Vander Weide's growth rates in effect over
9 the first five years, followed by a decline to long-term normalized growth of 4.9%
10 starting in Year 6. The long-term normalized growth rate of 4.9% is based on the
11 current average of the consensus economists' projected five and ten-year long-term
12 nominal GDP growth as published in the *Blue Chip Economic Forecasts*.¹ As shown
13 on my Schedule MPG-1, page 2, the DCF return for Empire is 9.0%, rather than
14 11.3%.

15 **Ex-Ante Risk Premium Analysis**

16 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM**
17 **ANALYSIS.**

18 A Based on a quarterly version of the DCF analysis of a group of electric companies in
19 comparison to the contemporary "A" rated utility bond yield, Dr. Vander Weide
20 estimates a monthly risk premium for electric companies during the period September
21 1999 through July 2007 (Schedule JVW-2). Based on this monthly data, he creates a
22 regression analysis that he asserts explains the inverse relationship between equity
23 risk premiums and interest rates during the study time periods.

¹ March 2008.

1 Using a July 2007 yield on "A" rated utility bonds of 6.25%, he estimates a risk
2 premium for electric companies of 4.72%. This indicates a return on equity of
3 10.97%. (Vander Weide Direct at 28-29).

4 **Q IS DR. VANDER WEIDE'S EX-ANTE RISK PREMIUM ANALYSIS REASONABLE?**

5 **A** No. This equity risk premium is overstated for several reasons. First, Dr. Vander
6 Weide employs a quarterly version of the DCF model that overstates a DCF return for
7 use in regulatory proceedings. By inflating the DCF return, he has inflated the market
8 risk premium.

9 Second, in this analysis Dr. Vander Weide's DCF return estimates during the
10 period 1999-2007 seem suspiciously high. Specifically, as shown in the table below,
11 in 2006 and 2007 the average annual DCF return estimate is 11.07% and 11.06%,
12 respectively (Schedule JVW-2-2).

TABLE 2				
<u>Risk Premium</u>				
<u>Line</u>	<u>Date</u>	<u>DCF</u> (1)	<u>"A" Rated</u> <u>Bond Yield</u> (2)	<u>Risk</u> <u>Premium</u> (3)
1	Average (Sep'99-Jul'07)	11.05%	6.82%	4.22%
2	2000	12.10%	8.24%	3.86%
3	2001	12.69%	7.76%	4.93%
4	2002	12.46%	7.37%	5.09%
5	2003	10.36%	6.58%	3.78%
6	2004	9.16%	6.16%	3.00%
7	2005	9.21%	5.65%	3.57%
8	2006	11.07%	6.07%	5.01%
9	2007	11.06%	6.03%	5.03%

1 The DCF returns for 2006 and 2007 of over 11.0% are suspiciously high,
2 when compared to the average industry authorized returns on equity by regulatory
3 commissions for electric utility companies in these same years. Electric utility
4 companies' average authorized returns on equity in 2006 and 2007 were 10.30% and
5 10.28%,² respectively. As such, Dr. Vander Weide's DCF returns are about 77 basis
6 points greater than the industry average authorized returns. As such, the risk
7 premiums of 5.0% estimated in 2006 and 2007 reflect Dr. Vander Weide's very high
8 DCF returns in these two years. Reflecting more reasonable DCF return estimates,
9 more in line with those of regulatory commissions, would suggest an equity risk
10 premium over an "A" rated utility bond of about 4.25% in 2006 and 2007. With this
11 correction to the 2006 and 2007 risk premiums, a majority of the risk premiums during
12 the study period generally fall in the range of 4.0% to 4.5%. This suggests the period
13 average risk premium of 4.22% is reasonable. However, again, Dr. Vander Weide's
14 DCF return estimates are way out of line with reasonable estimates of utility cost of
15 capital for these same time periods.

16 **Q COULD AN EX-ANTE RISK PREMIUM ANALYSIS PRODUCE A REASONABLE**
17 **RETURN ON EQUITY FOR EMPIRE IN THIS PROCEEDING?**

18 A Only generally because the risk premium estimate itself is highly uncertain.
19 Nevertheless, using the study average risk premium estimate of 4.22%, which
20 appears over inflated on its face due to an excessive DCF return estimate, and the
21 current yield on "A" rated utility bonds of 6.1%, would indicate a risk premium return
22 on equity in this case of 10.32%.

23 Using an average risk premium is likely reasonable at this time because, as I
24 indicated in my direct testimony, the utility industry risk appears to be relatively below

² Edison Electric Institute; "Rate Case Summary," Q4 2007 Financial Update at 4.

1 average as indicated by the bond yield spread between utilities and Treasuries. In
2 any event, Dr. Vander Weide's ex-ante risk premium analysis more reasonably
3 estimates a return on equity of 10.3%, and Dr. Vander Weide's inflated return
4 estimate of 11.0% should be rejected.

5 **Ex-Post Risk Premium Analysis**

6 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S EX-POST RISK PREMIUM**
7 **ANALYSIS.**

8 A Dr. Vander Weide develops his ex-post risk premium analysis by reviewing the
9 historical achieved returns on common equity investments proxy index, relative to the
10 achieved return from investing in Moody's "A" rated utility bonds. Dr. Vander Weide
11 estimates an equity risk premium in the range of 4.45% to 5.10%. The 4.45% equity
12 risk premium is based on the achieved return of the S&P utility stock index relative to
13 the achieved return on Moody's "A" rated utility bonds. The 5.10% equity risk
14 premium is based on the achieved return of the S&P 500 relative to Moody's "A" rated
15 utility bonds.

16 He adds these equity risk premiums to the July 2007 "A" rated utility bond
17 yield of 6.25%. With this method he estimates a return on equity for Empire in the
18 range of 10.7% to 11.4%, with a midpoint of 11.0% (Vander Weide direct at 35-36).

19 **Q DOES DR. VANDER WEIDE'S EX-POST RISK PREMIUM ANALYSIS OVERSTATE**
20 **A FAIR RETURN FOR EMPIRE?**

21 A In part, yes. His equity risk premium based on a comparison of the S&P 500 return to
22 "A" rated utility bond yields should be rejected because it does not produce an
23 appropriate risk-adjusted return for Empire. Dr. Vander Weide has not provided any

1 evidence that the S&P 500 is an appropriate risk proxy index for Empire's investment
2 risk. Indeed, his CAPM analysis is an implicit admission that Empire has a lower risk
3 than the overall market. He admits Empire has below market risk at page 31 of his
4 testimony but then opines that an S&P 500 risk premium is a reasonable upper band.
5 Therefore, the equity risk premium to the S&P 500 overstates the equity risk premium
6 for Empire.

7 His second ex-post analysis also is flawed. It compares the S&P utilities index
8 to the yield on "A" rated utility bonds. The S&P utilities index also includes
9 companies that may not be risk comparable to Empire. Dr. Vander Weide has not
10 shown that this index is a reasonable risk proxy for Empire. Further, Dr. Vander
11 Weide's claim at page 31 that Empire has greater risk than the average utility in the
12 S&P utilities index was not supported and is a baseless assertion.

13 Nevertheless, applying the equity risk premium derived in the S&P utilities
14 index analysis of 4.45% to the current "A" rated utility bond yield of 6.1% (rather than
15 Dr. Vander Weide's exaggerated projected "A" rated utility bond yield of 6.25%) would
16 produce an ex-post risk premium cost projection of about 10.55%.

17 **Q WHAT IS THE APPROPRIATE RETURN ON EQUITY FOR EMPIRE**
18 **CONSIDERING THE FLAWS IN DR. VANDER WEIDE'S RISK PREMIUM**
19 **ANALYSIS?**

20 **A** My adjustments to Dr. Vander Weide's risk premium studies indicate a return in the
21 range of 10.3% to 10.55%. The midpoint of this range is approximately 10.42%. This
22 return on equity is more reasonable than Dr. Vander Weide's estimated return on his
23 model of 11.0%.

1 **Capital Asset Pricing Model (CAPM) Analysis**

2 **Q PLEASE DESCRIBE DR. VANDER WEIDE'S CAPM ANALYSIS.**

3 A Dr. Vander Weide relies on a July 2007 Treasury bond yield of 5.19%, a beta
4 estimate for utility companies of 0.94, and an estimated range of the market risk
5 premium of 7.10% to 8.41%. With these parameters, Dr. Vander Weide estimates a
6 CAPM return of 11.9% to 13.0%, with a midpoint of 12.5% (Vander Weide Direct
7 at 38).

8 **Q IS DR. VANDER WEIDE'S CAPM ANALYSIS REASONABLE?**

9 A No. Dr. Vander Weide's CAPM return estimate would be much lower using current
10 20-year Treasury bond yields, and current *Value Line* betas for its proxy groups.
11 These adjustments would reduce his CAPM return estimate. However, I take issue
12 with Dr. Vander Weide's market risk premium estimates in the range of 7.1% to
13 8.41%. These market risk premium estimates are overstated and thereby inflate his
14 CAPM return estimate.

15 **Q WHY IS DR. VANDER WEIDE'S HISTORICAL MARKET RISK PREMIUM**
16 **ESTIMATE OF 7.1% INFLATED?**

17 A There are several flaws in Dr. Vander Weide's historical market risk premium.

18 This market risk premium is based on *Morningstar* data and is calculated from
19 the differences between the income return on Treasury bond investments and the
20 total return on market equity investments.

21 This is not reasonable for at least two reasons. First, the income return on
22 Treasury securities is a forward-looking expected return if the Treasury bond is held
23 to maturity. The income return ignores annual capital gains/losses on Treasury

1 securities. In contrast, his total return on equities is a backward-looking historical
2 review that includes both income return and capital gains/losses. Hence, his market
3 risk premium is based on the mismatch of a forward-looking expected income return
4 on Treasuries, and historical actual achieved total returns on market equity securities.
5 This mixing of forward-looking income returns and historical achieved total returns
6 inflates his estimated market risk premium.

7 Second, his use of only the income return on Treasury bonds represents an
8 investment annual performance that cannot rationally be expected by investors.
9 Specifically, investors understand that investments in Treasury bond securities will
10 produce both cash coupon yields, based on the income return, and the expectations
11 of bond price changes on an annual basis over the expected holding period. Hence,
12 a risk-free proxy based on an investment that is not reflective of investors'
13 expectations cannot rationally reflect the market's risk-free rate built into security
14 market prices. Hence, his development of an equity risk premium is simply based on
15 an unrealistic premise and does not capture rational expectations.

16 **Q CAN AN HISTORICAL MARKET RISK PREMIUM BE REASONABLY**
17 **ESTIMATED?**

18 **A** Yes. In the current edition, *Morningstar* estimated an historical total return on market
19 equity securities above the achieved total return on Treasury bonds to be 6.5% for
20 the period 1926 through 2007.³ This 6.5% equity risk premium is the actual historical
21 market risk premium earned on market investments (12.3%) relative to the returns
22 earned on long-term Treasury bond investments (5.8%). This market risk premium is

³ *Morningstar* "Stocks, Bonds, Bills and Inflation," 2008 Yearbook at 31.

1 more accurate and does not suffer from the same data flaws included in Dr. Vander
2 Weide's market risk premium.

3 **Q ARE THERE OTHER CONSIDERATIONS FOR THE USE OF *MORNINGSTAR'S***
4 **ESTIMATED MARKET RISK PREMIUM?**

5 A Yes. In addition to my conclusion that *Morningstar's* method of estimating the market
6 risk premium is flawed for the reasons discussed above, I would note that
7 *Morningstar* has estimated more than one market risk premium using its total stock
8 return less Treasury bond income return methodology and estimated market risk
9 premiums in the range of 6.35% to 7.1%. Importantly, Dr. Vander Weide's use of the
10 *Morningstar* data is based on the highest market risk premium estimate made by
11 *Morningstar*.

12 In its 2008 *Valuation Edition*, *Morningstar* found that the market risk premium
13 estimate varies depending on the market proxy index used. The long horizon market
14 risk premium using the S&P 500 was 7.1% as relied on by Dr. Vander Weide, but it
15 was 6.8% based on the New York Stock Exchange Index, and 6.35% using the two
16 largest decile portion of the New York Stock Exchange.⁴ Further, concerning using
17 the S&P 500 as the index, *Morningstar* found that the return on the stock market
18 outpaced the growth in earnings and dividends during the historical time period.
19 *Morningstar* noted that during the historical period, the price to earnings ratio
20 expanded over this historical time period, and concluded that the expansion to the
21 price earnings ratio could not continue indefinitely. Therefore, *Morningstar* also
22 estimated a market risk premium using a supply-side equity risk premium model to

⁴ *Morningstar* SBBI 2008 Yearbook Valuation Edition at 72, Table 5-1.

1 adjust for the expanding price to earnings ratio. Using this alternative methodology,
2 *Morningstar* estimated a market risk premium of 6.35%.

3 For all these reasons, a market risk premium of 6.5% is in approximately the
4 middle of *Morningstar's* various estimates of market risk premium estimate (7.1%,
5 6.8%, 6.35%) based on various indexes, and reflecting the unsustainability of stock
6 prices increasing faster than earnings and dividends. As such, an estimate of the
7 market risk premium of 6.5% is in fact more in line with the range of *Morningstar's*
8 market risk premium estimates than is Dr. Vander Weide's use of *Morningstar's*
9 highest market risk premium estimate.⁵

10 **Q ARE THERE ANY FLAWS IN DR. VANDER WEIDE'S FORWARD-LOOKING**
11 **MARKET RISK PREMIUM ESTIMATE?**

12 **A** Yes. Dr. Vander Weide estimates a second CAPM analysis and market risk premium
13 based on a DCF return for the S&P 500 of 13.6%, less his risk-free rate estimate of
14 5.19%. This implies a market risk premium of 8.41%. This market risk premium is
15 overstated for several reasons.

16 First, Dr. Vander Weide's estimated return of 13.6% reflects his DCF analysis
17 on the dividend paying stocks in the S&P 500. Because he has only reflected a DCF
18 analysis on the companies that are currently paying dividends, he has likely
19 overstated the growth prospects and expected return on the S&P 500. Indeed, there
20 are equity securities in the marketplace that do not pay dividends, and are not
21 expected to grow at the same rate as other companies. Hence, his analysis of the
22 S&P 500 is incomplete and likely overstates the expected market return.

⁵ *Morningstar* SBBI 2008 Yearbook Valuation Edition at 72-98.

1 Second, the market DCF return of 13.6% is not reasonable. The dividend
2 yield on the S&P 500 is approximately 2.1% currently. Hence, a 13.6% DCF return
3 on the market implies a growth rate of approximately 11.5%. This growth rate is more
4 than two times the expected growth in the U.S. economy of 4.9%, and therefore does
5 not reflect a reasonable sustainable long-term growth rate for the stock market that is
6 required by the DCF model. Further, the expected growth of the market of 11.5% is
7 significantly higher than the historical growth of the market of 7.8%, as estimated by
8 *Morningstar* over the period 1926 – 2007 (SBBI 2008 Yearbook at 119). Dr. Vander
9 Weide's growth rate projection for the S&P 500 is excessive and irrationally high.
10 Therefore, his market risk premium of 8.41% is flawed and should be rejected.

11 **Q WHAT BETA ESTIMATES DID DR. VANDER WEIDE USE IN HIS CAPM**
12 **ANALYSIS?**

13 A Dr. Vander Weide used a beta estimate for his comparable group of 0.94.

14 **Q WHY DO YOU BELIEVE DR. VANDER WEIDE'S RISK-FREE RATE ESTIMATE**
15 **AND BETA ESTIMATE OVERSTATE THE CURRENT MARKET DATA?**

16 A Dr. Vander Weide relied on a 20-year Treasury bond in July 2007 of 5.19%. The
17 current Treasury bond yield is 4.6%.⁶ Further, the projected 30-year Treasury bond
18 yield out over the next two years is approximately 4.8%. These current and projected
19 yields reflect the market's current cost estimate for Empire today and over the next
20 few years while the rates determined in this proceeding will be in effect.

21 Second, as shown on my Schedule MPG-2, page 2, I have updated
22 Dr. Vander Weide's beta estimates for his proxy group. The current average and

⁶ *Blue Chip Financial Forecasts*, March 1, 2008.

1 median betas for his proxy group are 0.84 and 0.85, respectively. Hence, updating
2 the estimates used for Dr. Vander Weide's proxy group indicate a beta of 0.85 is
3 reasonable. Dr. Vander Weide's beta estimate of 0.94 is unreasonable and should
4 be rejected.

5 **Q HOW WOULD DR. VANDER WEIDE'S CAPM CHANGE IF YOU USE MORE**
6 **REALISTIC MARKET ESTIMATES?**

7 A Using a beta estimate of 0.85, a more realistic historical risk premium of 6.5% and the
8 current risk-free rate projection (30-year Treasury bond) of 4.8% will produce a CAPM
9 return on equity for Empire of 10.31% ($4.8\% + 0.85 \times 6.5\%$).

10 **Q HOW DOES THIS RESULT COMPARE TO THE CAPM RETURN ON EQUITY AS**
11 **FILED IN YOUR DIRECT TESTIMONY?**

12 A As shown on Schedule MPG-3, my CAPM return estimate is 10.46%, reflecting a
13 risk-free rate of 4.8%.

14 **Dr. Vander Weide's Proxy Group**

15 **Q DO YOU BELIEVE THE SIZE OF THE COMPARABLE GROUP MATTERS WHEN**
16 **ESTIMATING THE RETURN ON EQUITY FOR EMPIRE?**

17 A No. In fact, applying my methodology as discussed in my direct testimony, I updated
18 the DCF analyses for my comparable group and Dr. Vander Weide's comparable
19 group. My recommended return on equity of 10.0% is reasonable based on market
20 return estimates from both proxy groups.

1 **Q IF YOU APPLIED YOUR CONSTANT AND NON-CONSTANT GROWTH DCF**
2 **METHODOLOGIES TO DR. VANDER WEIDE'S PROXY GROUP, WHAT RETURN**
3 **ON EQUITY ESTIMATES WOULD YOU PRODUCE?**

4 A As shown on my Schedule MPG-4, using Dr. Vander Weide's proxy group, and my
5 constant growth and two-stage growth DCF return estimates, produces a return on
6 equity in the range of 9.3% to 11.8% .

7 Just as in my direct testimony, I have the same concerns about the reliability
8 of the constant growth DCF return estimate in this proceeding. Specifically,
9 Dr. Vander Weide's proxy group's average growth rate is 7.36%. This growth rate
10 exceeds a reasonable growth estimate that can be sustained indefinitely. Since the
11 constant growth model requires a growth rate that can be sustained over an indefinite
12 period of time, the constant growth DCF return estimate applied to Dr. Vander
13 Weide's proxy group is not reliable and should be given little to no weight in this
14 proceeding. As such, based on my DCF studies, a return on equity of 9.5% is
15 appropriate for Empire.

16 **Q DID YOU CONDUCT A CAPM ANALYSIS ON DR. VANDER WEIDE'S PROXY**
17 **GROUP?**

18 A Yes. The CAPM return for Dr. Vander Weide's proxy group using a proxy group beta
19 of 0.85, market risk premium in the range of 6.5% to 6.8%, and a projected 30-year
20 Treasury bond yield of 4.8%, produces a CAPM return for this group in the range of
21 10.3% to 10.6% with a midpoint of 10.46% .

1 **Q PLEASE SUMMARIZE YOUR RETURN ON EQUITY ESTIMATES USING**
2 **DR. VANDER WEIDE'S PROXY GROUP.**

3 A My DCF return of 9.5% and CAPM return of 10.46% would support my return on
4 equity of 10.0% for Empire in this proceeding. As a result, my analyses consistently
5 produce a fair return on equity for Empire of 10.0% when they are applied to either
6 my proxy group or Dr. Vander Weide's proxy group.

7 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

8 A Yes.

\\Huey\Shares\PLDocs\SDW\8875\Testimony - BAI\130184.doc

The Empire District Electric Company

Schedule JWV-1 Summary of Discounted Cash Flow Analysis

Line	Electric Utility	Last Dividend (1)	Annual Dividend (2)	Stock Price (3)	Annual Adjusted Div. Yield (4)	Annual Growth (5)	Market Cap \$ (Mil) (6)	Quarterly Cost of Equity (7)
1	Alliant Energy	\$0.32	\$1.27	\$41.09	3.25%	4.83%	\$ 4,225	7.8%
2	Amer. Elec. Power	\$0.39	\$1.56	\$46.57	3.54%	5.72%	\$ 19,102	9.1%
3	Ameren Corp.	\$0.64	\$2.54	\$51.49	5.25%	6.42%	\$ 10,610	11.7%
4	Black Hills	\$0.34	\$1.36	\$40.21	3.61%	6.67%	\$ 1,559	12.4%
5	Consolidated Edison	\$0.58	\$2.32	\$47.11	5.09%	3.45%	\$ 12,736	9.3%
6	Constellation Energy	\$0.44	\$1.74	\$89.82	2.20%	13.67%	\$ 15,946	16.3%
7	Dominion Resources	\$0.71	\$2.84	\$86.40	3.52%	7.17%	\$ 31,914	9.2%
8	DPL Inc.	\$0.26	\$1.04	\$29.50	3.80%	7.75%	\$ 3,235	12.4%
9	DTE Energy	\$0.53	\$2.12	\$50.63	4.43%	5.75%	\$ 8,784	8.7%
10	Edison International	\$0.29	\$1.16	\$56.04	2.23%	7.54%	\$ 18,343	11.4%
11	Entergy Corp.	\$0.54	\$2.16	\$109.20	2.16%	9.17%	\$ 20,259	11.0%
12	Exelon Corp.	\$0.44	\$1.76	\$75.13	2.57%	9.70%	\$ 51,200	12.3%
13	FirstEnergy Corp.	\$0.50	\$2.00	\$66.76	3.24%	8.29%	\$ 19,589	10.7%
14	FPL Group	\$0.41	\$1.64	\$60.65	2.96%	9.57%	\$ 25,442	12.0%
15	Great Plains Energy	\$0.42	\$1.66	\$30.15	5.74%	4.25%	\$ 2,527	7.7%
16	Hawaiian Electric	\$0.31	\$1.24	\$24.16	5.35%	4.30%	\$ 1,847	8.7%
17	IDACORP Inc.	\$0.30	\$1.20	\$32.26	3.93%	5.67%	\$ 1,511	8.4%
18	Integrus Energy	\$0.66	\$2.64	\$53.91	5.16%	5.33%	\$ 4,073	8.4%
19	MDU Resources	\$0.14	\$0.54	\$29.25	1.98%	7.35%	\$ 5,140	11.7%
20	NiSource Inc.	\$0.23	\$0.92	\$21.63	4.41%	3.62%	\$ 5,179	8.9%
21	Northeast Utilities	\$0.19	\$0.75	\$29.51	2.83%	11.00%	\$ 4,477	14.7%
22	NSTAR	\$0.33	\$1.30	\$33.70	4.10%	6.25%	\$ 3,511	12.1%
23	Otter Tail Corp.	\$0.29	\$1.17	\$32.16	3.82%	4.75%	\$ 1,053	7.7%
24	Pepeco Holdings	\$0.26	\$1.04	\$28.76	3.91%	8.00%	\$ 5,192	11.9%
25	PG&E Corp.	\$0.36	\$1.44	\$47.36	3.30%	8.63%	\$ 16,339	13.8%
26	Pinnacle West Capital	\$0.53	\$2.10	\$43.18	5.14%	5.73%	\$ 4,084	8.9%
27	PNM Resources	\$0.23	\$0.92	\$28.71	3.54%	10.47%	\$ 1,837	16.2%
28	PPL Corp	\$0.31	\$1.22	\$46.47	2.98%	13.57%	\$ 20,040	16.6%
29	Progress Energy	\$0.61	\$2.44	\$48.02	5.30%	4.36%	\$ 12,354	8.2%
30	Puget Energy Inc.	\$0.25	\$1.00	\$24.74	4.26%	5.32%	\$ 2,854	10.7%
31	SCANA Corp.	\$0.44	\$1.76	\$40.52	4.54%	4.45%	\$ 4,481	7.9%
32	Sempra Energy	\$0.31	\$1.24	\$60.07	2.22%	7.45%	\$ 14,822	9.2%
33	Southern Co.	\$0.40	\$1.61	\$35.37	4.79%	5.02%	\$ 27,385	11.5%
34	Vectren Corp.	\$0.32	\$1.26	\$27.79	4.71%	3.87%	\$ 2,029	7.5%
35	Wisconsin Energy	\$0.25	\$1.00	\$46.19	2.34%	8.30%	\$ 5,269	10.5%
36	Westar Energy	\$0.27	\$1.08	\$25.65	4.43%	5.31%	\$ 2,324	9.2%
37	Xcel Energy Inc.	\$0.23	\$0.92	\$21.89	4.47%	6.33%	\$ 8,876	10.7%
38	Average	\$0.38	\$1.51	\$44.92	3.81%	6.89%		10.7%
39	Market Weighted Average				3.43%	7.84%		11.3%

Source:

Vander Weide's Schedule JWV-1.

The Empire District Electric Company

Schedule JVW-1 Summary of Discounted Cash Flow Analysis

<u>Line</u>	<u>Electric Utility</u>	<u>Last Dividend</u> (1)	<u>Annual Dividend</u> (2)	<u>Stock Price</u> (3)	<u>First Stage Growth</u> (4)	<u>Second Stage Growth</u> (5)	<u>Two-Stage Growth DCF</u> (6)
1	Alliant Energy	\$0.32	\$1.27	\$41.09	4.83%	4.90%	8.13%
2	Amer. Elec. Power	\$0.39	\$1.56	\$46.57	5.72%	4.90%	8.54%
3	Ameren Corp.	\$0.64	\$2.54	\$51.49	6.42%	4.90%	10.42%
4	Black Hills	\$0.34	\$1.36	\$40.21	6.67%	4.90%	8.73%
5	Consolidated Edison	\$0.58	\$2.32	\$47.11	3.45%	4.90%	9.75%
6	Constellation Energy	\$0.44	\$1.74	\$89.82	13.67%	4.90%	7.87%
7	Dominion Resources	\$0.71	\$2.84	\$86.40	7.17%	4.90%	8.71%
8	DPL Inc.	\$0.26	\$1.04	\$29.50	7.75%	4.90%	9.09%
9	DTE Energy	\$0.53	\$2.12	\$50.63	5.75%	4.90%	9.46%
10	Edison International	\$0.29	\$1.16	\$56.04	7.54%	4.90%	7.32%
11	Entergy Corp.	\$0.54	\$2.16	\$109.20	9.17%	4.90%	7.39%
12	Exelon Corp.	\$0.44	\$1.76	\$75.13	9.70%	4.90%	7.93%
13	FirstEnergy Corp.	\$0.50	\$2.00	\$66.76	8.29%	4.90%	8.54%
14	FPL Group	\$0.41	\$1.64	\$60.65	9.57%	4.90%	8.38%
15	Great Plains Energy	\$0.42	\$1.66	\$30.15	4.25%	4.90%	10.52%
16	Hawaiian Electric	\$0.31	\$1.24	\$24.16	4.30%	4.90%	10.15%
17	IDACORP Inc.	\$0.30	\$1.20	\$32.26	5.67%	4.90%	8.94%
18	Integrus Energy	\$0.66	\$2.64	\$53.91	5.33%	4.90%	10.13%
19	MDU Resources	\$0.14	\$0.54	\$29.25	7.35%	4.90%	7.02%
20	NiSource Inc.	\$0.23	\$0.92	\$21.63	3.62%	4.90%	9.11%
21	Northeast Utilities	\$0.19	\$0.75	\$29.51	11.00%	4.90%	8.38%
22	NSTAR	\$0.33	\$1.30	\$33.70	6.25%	4.90%	9.19%
23	Otter Tail Corp.	\$0.29	\$1.17	\$32.16	4.75%	4.90%	8.69%
24	Pepco Holdings	\$0.26	\$1.04	\$28.76	8.00%	4.90%	9.24%
25	PG&E Corp.	\$0.36	\$1.44	\$47.36	8.63%	4.90%	8.65%
26	Pinnacle West Capital	\$0.53	\$2.10	\$43.18	5.73%	4.90%	10.19%
27	PNM Resources	\$0.23	\$0.92	\$28.71	10.47%	4.90%	9.17%
28	PPL Corp	\$0.31	\$1.22	\$46.47	13.57%	4.90%	8.89%
29	Progress Energy	\$0.61	\$2.44	\$48.02	4.36%	4.90%	10.11%
30	Puget Energy Inc.	\$0.25	\$1.00	\$24.74	5.32%	4.90%	9.22%
31	SCANA Corp.	\$0.44	\$1.76	\$40.52	4.45%	4.90%	9.37%
32	Sempra Energy	\$0.31	\$1.24	\$60.07	7.45%	4.90%	7.30%
33	Southern Co.	\$0.40	\$1.61	\$35.37	5.02%	4.90%	9.70%
34	Vectren Corp.	\$0.32	\$1.26	\$27.79	3.87%	4.90%	9.44%
35	Wisconsin Energy	\$0.25	\$1.00	\$46.19	8.30%	4.90%	7.53%
36	Westar Energy	\$0.27	\$1.08	\$25.65	5.31%	4.90%	9.40%
37	Xcel Energy Inc.	\$0.23	\$0.92	\$21.89	6.33%	4.90%	9.59%
38	Average	\$0.38	\$1.51	\$44.92	6.89%	4.90%	9.0%

Source:

Vander Weide's Schedule JVW-1

The Empire District Electric Company

Gorman Proxy Group Comparable Group Beta

<u>Line</u>	<u>Electric Utility*</u>	<u>2003</u> (1)	<u>2004</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>5-Yr. AVG</u> (6)
1	Ameren Corp.	0.65	0.75	0.75	0.75	0.80	0.74
2	Avista Corp.	0.75	0.85	0.90	0.95	0.95	0.88
3	Cleco Corp.	0.90	1.05	1.15	1.25	1.15	1.10
4	DTE Energy	0.60	0.65	0.70	0.75	0.80	0.70
5	Empire District	0.60	0.65	0.70	0.80	0.85	0.72
6	Entergy Corp.	0.65	0.75	0.75	0.85	0.85	0.77
7	Exelon Corp.	0.70	0.70	0.75	0.80	0.85	0.76
8	FirstEnergy	0.70	0.75	0.75	0.80	0.80	0.76
9	IDACORP.	0.75	0.85	0.95	1.00	0.95	0.90
10	OGE Energy	0.60	0.70	0.75	0.75	0.85	0.73
11	NiSource, Inc.	0.65	0.75	0.80	0.90	0.90	0.80
12	Pepco Holdings	N/A	0.90	0.90	0.85	0.90	0.89
13	PG&E Corp.	0.90	1.05	1.10	1.15	0.85	1.01
14	Pinnacle West	0.70	0.85	0.90	1.00	0.80	0.85
15	PNM Resources	0.70	0.85	0.90	1.00	0.90	0.87
16	Xcel Energy, Inc.	0.70	0.80	0.80	0.90	0.80	0.80
17	Average	0.70	0.81	0.85	0.91	0.88	0.83
18	Median	0.70	0.78	0.80	0.88	0.85	0.80

Source:

The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

* The historical data was obtained from the Value Line Investment Analyzer.

The Empire District Electric Company

Vander Weide Proxy Group Comparable Group Beta

<u>Line</u>	<u>Electric Utility*</u>	<u>2003</u> (1)	<u>2004</u> (2)	<u>2005</u> (3)	<u>2006</u> (4)	<u>2007</u> (5)	<u>5-Yr. AVG</u> (6)
1	Alliant Energy	0.70	0.80	0.85	0.90	0.80	0.81
2	Amer. Elec. Power	0.95	1.15	1.20	1.25	0.95	1.10
3	Ameren Corp.	0.65	0.75	0.75	0.75	0.80	0.74
4	Black Hills	0.80	0.90	1.00	1.05	0.90	0.93
5	Consolidated Edison	0.55	0.65	0.60	0.70	0.75	0.65
6	Constellation Energy	0.75	0.85	0.95	1.00	0.90	0.89
7	Dominion Resources	0.75	0.85	0.90	1.00	0.75	0.85
8	DPL Inc.	0.80	0.90	0.95	0.95	0.85	0.89
9	DTE Energy	0.60	0.65	0.70	0.75	0.80	0.70
10	Edison International	0.90	1.05	1.05	1.15	0.85	1.00
11	Entergy Corp.	0.65	0.75	0.75	0.85	0.85	0.77
12	Exelon Corp.	0.70	0.70	0.75	0.80	0.85	0.76
13	FirstEnergy Corp.	0.70	0.75	0.75	0.80	0.80	0.76
14	FPL Group	0.60	0.70	0.75	0.85	0.75	0.73
15	Great Plains Energy	0.70	0.80	0.85	0.90	0.80	0.81
16	Hawaiian Electric	0.55	0.65	0.70	0.70	0.75	0.67
17	IDACORP Inc.	0.75	0.85	0.95	1.00	0.95	0.90
18	Integrus Energy	0.70	0.75	0.75	0.80	0.80	0.76
19	MDU Resources	0.75	0.85	0.90	1.00	0.90	0.88
20	NiSource Inc.	0.65	0.75	0.80	0.90	0.90	0.80
21	Northeast Utilities	0.65	0.75	0.80	0.85	0.75	0.76
22	NSTAR	0.65	0.70	0.70	0.80	0.75	0.72
23	Otter Tail Corp.	0.55	0.55	0.55	0.65	0.95	0.65
24	Pepco Holdings	N/A	0.90	0.90	0.85	0.90	0.89
25	PG&E Corp.	0.90	1.05	1.10	1.15	0.85	1.01
26	Pinnacle West Capital	0.70	0.85	0.90	1.00	0.80	0.85
27	PNM Resources	0.70	0.85	0.90	1.00	0.90	0.87
28	PPL Corp	0.85	0.95	0.95	1.00	0.90	0.93
29	Progress Energy	0.85	0.85	0.85	0.85	0.80	0.84
30	Puget Energy Inc.	0.65	0.75	0.80	0.80	0.90	0.78
31	SCANA Corp.	0.60	0.70	0.75	0.80	0.80	0.73
32	Sempra Energy	0.80	0.90	1.00	1.10	0.90	0.94
33	Southern Co.	0.65	0.65	0.65	0.65	0.70	0.66
34	Vectren Corp.	0.60	0.75	0.85	0.90	0.90	0.80
35	Wisconsin Energy	0.60	0.70	0.70	0.80	0.85	0.73
36	Westar Energy	0.60	0.75	0.85	0.90	0.85	0.79
37	Xcel Energy Inc.	0.70	0.80	0.80	0.90	0.80	0.80
38	Average	0.70	0.80	0.84	0.89	0.84	0.81
39	Median	0.70	0.75	0.85	0.90	0.85	0.80

Source:

The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

* The historical data was obtained from the Value Line Investment Analyzer.

The Empire District Electric Company

CAPM Return Estimate

<u>Line</u>	<u>Description</u>	<u>Historical Premium (1)</u>
1	Risk-Free Rate ¹	4.8%
2	Risk Premium ²	6.5%
3	Beta ³	0.85
4	CAPM	10.3%

<u>Line</u>	<u>Description</u>	<u>Prospective Premium (1)</u>
5	Risk-Free Rate ¹	4.8%
6	Risk Premium ²	6.8%
7	Beta ³	0.85
8	CAPM	10.6%
9	CAPM Average	10.46%

Sources:

¹ Blue Chip Financial Forecasts; March 1, 2008 at 2.

² Morningstar SBB; 2008 Yearbook at 31 and 120.

³ The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

The Empire District Electric Company

Gorman Proxy Group Constant Growth DCF Model

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>AVG (%) Growth</u>	<u>Annual Dividend²</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	Ameren Corp.	\$48.22	5.67%	\$2.54	5.57%	11.23%
2	Avista Corp.	\$20.35	4.67%	\$0.60	3.09%	7.75%
3	Cleco Corp.	\$25.95	13.67%	\$0.90	3.94%	17.61%
4	DTE Energy	\$43.37	5.67%	\$2.12	5.17%	10.83%
5	Empire District	\$22.16	7.20%	\$1.28	6.19%	13.39%
6	Entergy Corp.	\$112.51	11.24%	\$3.00	2.97%	14.20%
7	Exelon Corp.	\$79.64	11.11%	\$2.00	2.79%	13.90%
8	FirstEnergy Corp.	\$71.98	8.42%	\$2.20	3.31%	11.73%
9	IDACORP Inc.	\$32.87	5.67%	\$1.20	3.86%	9.52%
10	NiSource Inc.	\$18.46	3.12%	\$0.92	5.14%	8.25%
11	OGE Energy	\$34.16	3.50%	\$1.39	4.22%	7.72%
12	Pepco Holdings	\$27.22	11.57%	\$1.08	4.43%	15.99%
13	PG&E Corp.	\$42.06	8.41%	\$1.44	3.71%	12.12%
14	Pinnacle West Capital	\$39.68	2.42%	\$2.10	5.42%	7.84%
15	PNM Resources	\$18.26	9.93%	\$0.92	5.54%	15.47%
16	Xcel Energy Inc.	\$21.50	6.11%	\$0.92	4.54%	10.65%
17	Average	\$41.15	7.40%	\$1.54	4.37%	11.8%

Sources:

¹ <http://moneycentral.msn.com>, downloaded on March 12, 2008.

² The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

The Empire District Electric Company

Vander Weide Proxy Group

Constant Growth DCF Model

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>AVG (%) Growth</u>	<u>Annual Dividend²</u> (3)	<u>Adjusted Yield</u> (4)	<u>Constant Growth DCF</u> (5)
1	Alliant Energy	\$38.54	7.33%	\$1.40	3.90%	11.23%
2	Amer. Elec. Power	\$44.76	5.83%	\$1.64	3.88%	9.70%
3	Ameren Corp.	\$48.22	5.67%	\$2.54	5.57%	11.23%
4	Black Hills	\$40.18	6.40%	\$1.40	3.71%	10.11%
5	Consolidated Edison	\$45.25	3.54%	\$2.32	5.31%	8.85%
6	Constellation Energy	\$97.12	15.95%	\$1.91	2.28%	18.23%
7	Dominion Resources	\$44.48	9.68%	\$1.58	3.90%	13.57%
8	DPL Inc.	\$28.19	8.67%	\$1.10	4.24%	12.91%
9	DTE Energy	\$43.37	5.67%	\$2.12	5.17%	10.83%
10	Edison International	\$52.73	9.41%	\$1.22	2.53%	11.94%
11	Entergy Corp.	\$112.51	11.24%	\$3.00	2.97%	14.20%
12	Exelon Corp.	\$79.64	11.11%	\$2.00	2.79%	13.90%
13	FirstEnergy Corp.	\$71.98	8.42%	\$2.20	3.31%	11.73%
14	FPL Group	\$65.86	10.09%	\$1.78	2.98%	13.06%
15	Great Plains Energy	\$27.91	7.60%	\$1.66	6.40%	14.00%
16	Hawaiian Electric	\$22.59	4.37%	\$1.24	5.73%	10.09%
17	IDACORP Inc.	\$32.87	5.67%	\$1.20	3.86%	9.52%
18	Integrus Energy	\$49.74	6.68%	\$2.64	5.66%	12.34%
19	MDU Resources	\$26.56	7.53%	\$0.58	2.35%	9.88%
20	NiSource Inc.	\$18.46	3.12%	\$0.92	5.14%	8.25%
21	Northeast Utilities	\$29.06	9.31%	\$0.80	3.01%	12.32%
22	NSTAR	\$33.54	6.12%	\$1.40	4.43%	10.55%
23	Otter Tail Corp.	\$33.82	6.38%	\$1.17	3.69%	10.06%
24	Pepco Holdings	\$27.22	11.57%	\$1.08	4.43%	15.99%
25	PG&E Corp.	\$42.06	8.41%	\$1.44	3.71%	12.12%
26	Pinnacle West Capital	\$39.68	2.42%	\$2.10	5.42%	7.84%
27	PNM Resources	\$18.26	9.93%	\$0.92	5.54%	15.47%
28	PPL Corp	\$49.84	12.49%	\$1.22	2.75%	15.24%
29	Progress Energy	\$46.08	4.74%	\$2.46	5.59%	10.33%
30	Puget Energy Inc.	\$26.88	5.56%	\$1.00	3.93%	9.48%
31	SCANA Corp.	\$39.88	4.55%	\$1.84	4.82%	9.37%
32	Sempra Energy	\$58.06	6.98%	\$1.24	2.28%	9.26%
33	Southern Co.	\$37.31	4.95%	\$1.61	4.53%	9.49%
34	Vectren Corp.	\$27.91	4.96%	\$1.30	4.89%	9.84%
35	Wisconsin Energy	\$46.61	8.78%	\$1.00	2.33%	11.11%
36	Westar Energy	\$24.55	5.22%	\$1.08	4.63%	9.85%
37	Xcel Energy Inc.	\$21.50	6.11%	\$0.92	4.54%	10.65%
38	Average	\$43.06	7.36%	\$1.54	4.11%	11.5%

Sources:

¹ <http://moneycentral.msn.com>, downloaded on March 12, 2008.

² The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

The Empire District Electric Company

Gorman Proxy Group Two-Stage Growth DCF Model

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (2)	<u>First Stage Growth</u> (3)	<u>Second Stage Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Ameren Corp.	\$48.22	\$2.54	5.67%	4.90%	10.61%
2	Avista Corp.	\$20.35	\$0.60	4.67%	4.90%	7.95%
3	Cleco Corp.	\$25.95	\$0.90	13.67%	4.90%	10.16%
4	DTE Energy	\$43.37	\$2.12	5.67%	4.90%	10.20%
5	Empire District	\$22.16	\$1.28	7.20%	4.90%	11.57%
6	Entergy Corp.	\$112.51	\$3.00	11.24%	4.90%	8.58%
7	Exelon Corp.	\$79.64	\$2.00	11.11%	4.90%	8.35%
8	FirstEnergy Corp.	\$71.98	\$2.20	8.42%	4.90%	8.64%
9	IDACORP Inc.	\$32.87	\$1.20	5.67%	4.90%	8.86%
10	NiSource Inc.	\$18.46	\$0.92	3.12%	4.90%	9.73%
11	OGE Energy	\$34.16	\$1.39	3.50%	4.90%	8.91%
12	Pepco Holdings	\$27.22	\$1.08	11.57%	4.90%	10.41%
13	PG&E Corp.	\$42.06	\$1.44	8.41%	4.90%	9.08%
14	Pinnacle West Capital	\$39.68	\$2.10	2.42%	4.90%	9.88%
15	PNM Resources	\$18.26	\$0.92	9.93%	4.90%	11.42%
16	Xcel Energy Inc.	\$21.50	\$0.92	6.11%	4.90%	9.63%
17	Average	\$41.15	\$1.54	7.40%	4.90%	9.6%

Sources:

¹ <http://moneycentral.msn.com>, downloaded on March 12, 2008.

² The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

³ Blue Chip Economic Indicators, March 10, 2008.

The Empire District Electric Company

Vander Weide Proxy Group Two-Stage Growth DCF Model

<u>Line</u>	<u>Electric Utility</u>	<u>13-Week AVG Stock Price¹</u> (1)	<u>Annual Dividend²</u> (2)	<u>First Stage Growth</u> (3)	<u>Second Stage Growth³</u> (4)	<u>Two-Stage Growth DCF</u> (5)
1	Alliant Energy	\$38.54	\$1.40	7.33%	4.90%	9.14%
2	Amer. Elec. Power	\$44.76	\$1.64	5.83%	4.90%	8.90%
3	Ameren Corp.	\$48.22	\$2.54	5.67%	4.90%	10.61%
4	Black Hills	\$40.18	\$1.40	6.40%	4.90%	8.80%
5	Consolidated Edison	\$45.25	\$2.32	3.54%	4.90%	9.97%
6	Constellation Energy	\$97.12	\$1.91	15.95%	4.90%	8.21%
7	Dominion Resources	\$44.48	\$1.58	9.68%	4.90%	9.48%
8	DPL Inc.	\$28.19	\$1.10	8.67%	4.90%	9.71%
9	DTE Energy	\$43.37	\$2.12	5.67%	4.90%	10.20%
10	Edison International	\$52.73	\$1.22	9.41%	4.90%	7.85%
11	Entergy Corp.	\$112.51	\$3.00	11.24%	4.90%	8.58%
12	Exelon Corp.	\$79.64	\$2.00	11.11%	4.90%	8.35%
13	FirstEnergy Corp.	\$71.98	\$2.20	8.42%	4.90%	8.64%
14	FPL Group	\$65.86	\$1.78	10.09%	4.90%	8.45%
15	Great Plains Energy	\$27.91	\$1.66	7.60%	4.90%	11.88%
16	Hawaiian Electric	\$22.59	\$1.24	4.37%	4.90%	10.53%
17	IDACORP Inc.	\$32.87	\$1.20	5.67%	4.90%	8.86%
18	Integrus Energy	\$49.74	\$2.64	6.68%	4.90%	10.90%
19	MDU Resources	\$26.56	\$0.58	7.53%	4.90%	7.46%
20	NiSource Inc.	\$18.46	\$0.92	3.12%	4.90%	9.73%
21	Northeast Utilities	\$29.06	\$0.80	9.31%	4.90%	8.40%
22	NSTAR	\$33.54	\$1.40	6.12%	4.90%	9.52%
23	Otter Tail Corp.	\$33.82	\$1.17	6.38%	4.90%	8.78%
24	Pepco Holdings	\$27.22	\$1.08	11.57%	4.90%	10.41%
25	PG&E Corp.	\$42.06	\$1.44	8.41%	4.90%	9.08%
26	Pinnacle West Capital	\$39.68	\$2.10	2.42%	4.90%	9.88%
27	PNM Resources	\$18.26	\$0.92	9.93%	4.90%	11.42%
28	PPL Corp	\$49.84	\$1.22	12.49%	4.90%	8.46%
29	Progress Energy	\$46.08	\$2.46	4.74%	4.90%	10.46%
30	Puget Energy Inc.	\$26.88	\$1.00	5.56%	4.90%	8.92%
31	SCANA Corp.	\$39.88	\$1.84	4.55%	4.90%	9.67%
32	Sempra Energy	\$58.06	\$1.24	6.98%	4.90%	7.34%
33	Southern Co.	\$37.31	\$1.61	4.95%	4.90%	9.44%
34	Vectren Corp.	\$27.91	\$1.30	4.96%	4.90%	9.80%
35	Wisconsin Energy	\$46.61	\$1.00	8.78%	4.90%	7.56%
36	Westar Energy	\$24.55	\$1.08	5.22%	4.90%	9.58%
37	Xcel Energy Inc.	\$21.50	\$0.92	6.11%	4.90%	9.63%
38	Average	\$43.06	\$1.54	7.36%	4.90%	9.3%

Sources:

¹ <http://moneycentral.msn.com>, downloaded on March 12, 2008.

² The Value Line Investment Survey; December 28, 2007; February 8 and February 28, 2008.

³ Blue Chip Economic Indicators, March 10, 2008.