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**Before the Public Service Commission  
of the State of Missouri**

**Surrebuttal Testimony**

**of**

**James H. Vander Weide, Ph.D.**

**March 2015**

Empire Exhibit No. 131  
Date 4-14-15 Reporter XF  
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OF  
DR. JAMES H. VANDER WEIDE  
ON BEHALF OF  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION

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**SURREBUTTAL TESTIMONY  
OF  
DR. JAMES H. VANDER WEIDE  
ON BEHALF OF  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. ER-2014-0351**

1 I. **INTRODUCTION**

2 Q. **PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

3 A. My name is James H. Vander Weide. I am President of Financial Strategy  
4 Associates, a firm that provides strategic and financial consulting services to  
5 business clients. My business address is 3606 Stoneybrook Drive, Durham,  
6 North Carolina 27705.

7 Q. **ARE YOU THE SAME JAMES H. VANDER WEIDE WHO PREVIOUSLY  
8 PROVIDED DIRECT AND REBUTTAL TESTIMONIES BEFORE THE  
9 MISSOURI PUBLIC SERVICE COMMISSION (“COMMISSION”) IN THIS  
10 PROCEEDING?**

11 A. Yes, I am.

12 Q. **WHAT WAS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS  
13 PROCEEDING?**

14 A. The purpose of my direct testimony in this proceeding was to prepare an  
15 independent appraisal of the cost of equity for The Empire District Electric  
16 Company (“Empire” or “the Company”) and to recommend to the Commission  
17 a range of returns on equity for the Company’s electric utility operations in  
18 Missouri.

19 Q. **HOW DID YOU ESTIMATE EMPIRE’S COST OF EQUITY?**

1 A. I estimated Empire's cost of equity by applying standard cost of equity  
2 methods, including the Discounted Cash Flow ("DCF"), the risk premium, and  
3 the Capital Asset Pricing Model ("CAPM") to market data for a large proxy  
4 group of electric utilities.

5 **Q. WHAT COST OF EQUITY RESULTS DID YOU OBTAIN FROM YOUR**  
6 **APPLICATION OF THESE COST OF EQUITY METHODS TO A LARGE**  
7 **PROXY GROUP OF ELECTRIC UTILITIES?**

8 A. From my DCF method, I obtained a cost of equity result equal to 10.0  
9 percent; from my risk premium methods, I obtained cost of equity results of  
10 10.8 percent and 10.7 percent; and from my CAPM, I obtained cost of equity  
11 results of 9.9 percent and 10.2 percent.

12 **Q. WHAT COST OF EQUITY DID YOU RECOMMEND BASED ON THESE**  
13 **RESULTS?**

14 A. I recommended a cost of equity in the range 10.0 percent to 10.8 percent,  
15 with an average of 10.5 percent based on the results of my DCF and risk  
16 premium studies.

17 **Q. WHAT ALLOWED RETURN ON COMMON EQUITY IS EMPIRE**  
18 **REQUESTING FOR THE PURPOSE OF DETERMINING THE COMPANY'S**  
19 **REVENUE REQUIREMENT IN THIS PROCEEDING?**

20 A. Empire is requesting an allowed return on common equity equal to  
21 10.15 percent for the purpose of calculating the Company's revenue  
22 requirement.

23 **Q. WHY IS THE COMPANY REQUESTING AN ALLOWED RETURN ON**  
24 **EQUITY THAT IS AT THE LOW END OF YOUR RECOMMENDED RANGE**  
25 **OF RETURNS?**

1 A. Empire Witness Ms. Kelly Walters explains in her direct testimony: “Since this  
2 case is the beginning of back-to-back rate cases to recover what are primarily  
3 environmental compliance costs, Empire has chosen to use a conservative  
4 return on equity that is toward the low side of Dr. Vander Weide’s  
5 recommendation.” (Walters at 6)

6 **Q. DID YOU UPDATE ANY OF YOUR COST OF EQUITY STUDIES IN YOUR  
7 REBUTTAL TESTIMONY?**

8 A. Yes. I updated my DCF results using data through December 2014.

9 **Q. WHAT AVERAGE DCF RESULT DID YOU REPORT IN YOUR REBUTTAL  
10 TESTIMONY?**

11 A. I reported an updated average DCF result equal to 9.9 percent, a result that is  
12 ten basis points lower than the 10.0 percent DCF result I reported in my direct  
13 testimony.

14 **Q. WHAT COST OF EQUITY DID YOU RECOMMEND IN EMPIRE’S 2012  
15 RATE CASE?**

16 A. I recommended a cost of equity equal to 10.6 percent in Empire’s 2012 rate  
17 case.

18 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

19 A. I have been asked by Empire to respond to the rebuttal testimonies filed in  
20 this proceeding by the Staff of the Missouri Public Service Commission  
21 (“Staff”) and by Mr. Lance C. Schafer, who testifies on behalf of the Office of  
22 the Public Counsel.

1 **II. RESPONSE TO STAFF REBUTTAL**

2 **Q. WHAT TOPIC DO YOU ADDRESS IN YOUR RESPONSE TO STAFF'S**  
3 **REBUTTAL TESTIMONY?**

4 A. I address Staff's claim that Empire's cost of equity has declined by more than  
5 the ten basis points implied by the difference between my 10.6 percent  
6 recommended cost of equity in Empire's 2012 case and my 10.5 percent  
7 average cost of equity in this proceeding.

8 **Q. HOW DOES STAFF ARRIVE AT ITS CONCLUSION THAT EMPIRE'S**  
9 **COST OF EQUITY HAS DECLINED BY MORE THAN TEN BASIS POINTS**  
10 **FROM THE TIME OF EMPIRE'S 2012 CASE TO TIME OF THE CURRENT**  
11 **PROCEEDING?**

12 A. Staff claims that it arrives at its conclusion by estimating the change in  
13 Empire's cost of equity from April 2012 to both May 2014 and December  
14 2014. Staff estimates this change by comparing its calculation of Empire's  
15 cost of equity in April 2012 to its calculation of the Company's cost of equity in  
16 both May and December 2014 "using COE estimation methods Dr. Vander  
17 Weide used in both cases." (Staff Rebuttal at 1)

18 **Q. STAFF CLAIMS THAT IT HAS USED YOUR COST OF EQUITY METHODS**  
19 **TO ESTIMATE THE CHANGE IN EMPIRE'S COST OF EQUITY FROM 2012**  
20 **TO 2014. DID STAFF IMPLEMENT YOUR COST OF EQUITY METHODS IN**  
21 **THE SAME MANNER AS YOU IMPLEMENT THESE METHODS?**

22 A. No. Staff's implementation of my cost of equity methods differs from my  
23 implementation in the choice of comparable companies and the choice of the  
24 interest rate to be used to estimate the interest rate component of the risk  
25 premium methods.

1 **Q. DID YOU USE THE SAME COST OF EQUITY ESTIMATION METHODS IN**  
2 **THIS PROCEEDING AS IN EMPIRE'S 2012 CASE?**

3 A. Yes. I estimated Empire's cost of equity in this proceeding based on cost of  
4 equity model results from applications of the DCF, risk premium, and CAPM  
5 methods.

6 **Q. HAVE YOU EXAMINED STAFF'S DCF, EX ANTE RISK PREMIUM, AND EX**  
7 **POST RISK PREMIUM ESTIMATES OF THE CHANGE IN EMPIRE'S COST**  
8 **OF EQUITY FROM 2012 TO 2014?**

9 A. Yes.

10 **Q. HAVE YOU FOUND ANY DATA ERRORS IN STAFF'S DCF AND RISK**  
11 **PREMIUM STUDIES PRESENTED IN ITS REBUTTAL TESTIMONY?**

12 A. Yes. I have found two significant data errors in Staff's DCF and risk premium  
13 studies. These errors cause Staff to greatly overestimate the change in  
14 Empire's cost of equity from 2012 to 2014. First, in Staff's 2012 DCF study,  
15 Staff failed to recognize that Duke Energy implemented a one-for-three stock  
16 split in 2012 that increased its dividend per share commensurate with the  
17 increase in stock price. However, Staff inadvertently used a post-split  
18 dividend along with a pre-split stock price in its calculation of Duke Energy's  
19 DCF result.<sup>1</sup> Second, Staff used incorrect interest rate information in its risk  
20 premium studies for both 2012 and 2014.

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<sup>1</sup> There are additional errors in Staff's 2012 DCF calculations relating to incorrect dividend inputs, but the error in the Duke Energy DCF calculation has the greatest impact on Staff's erroneous average DCF result.

1 Q. WHAT IS THE NUMERICAL IMPACT OF STAFF'S FAILURE TO  
2 RECOGNIZE DUKE ENERGY'S 2012 ONE-FOR-THREE STOCK SPLIT ON  
3 STAFF'S DCF ESTIMATE OF EMPIRE'S COST OF EQUITY IN 2012?

4 A. Because of Staff's failure to recognize the Duke Energy stock split, Staff used  
5 a dividend per share in its DCF analysis that was three times the actual  
6 dividend value. As a result, Staff mistakenly calculated a DCF estimate for  
7 Duke Energy equal to 20.5 percent in its 2012 study, rather than the correct  
8 9.7 percent DCF estimate Staff would have obtained if it had used the correct  
9 dividend data. This error alone incorrectly inflates Staff's 2012 average DCF  
10 result by fifty basis points. Staff should have reported an average DCF result  
11 in its 2012 study equal to 9.8 percent, not 10.3 percent.

12 Q. WHAT IMPACT DOES STAFF'S MISCALCULATION OF THE AVERAGE  
13 2012 DCF COST OF EQUITY HAVE ON ITS CONCLUSION THAT  
14 EMPIRE'S DCF COST OF EQUITY DECLINED BY 80 BASIS POINTS  
15 FROM APRIL 2012 TO DECEMBER 2014?

16 A. Staff's miscalculation leads them to the false conclusion that Empire's DCF  
17 cost of equity declined by 80 basis points, when Staff's evidence, as  
18 corrected, indicates that the DCF cost of equity declined by 30 basis points  
19 (see JVV Surrebuttal Schedule 1).

20 Q. STAFF REPORTS A DCF RESULT FOR DECEMBER 2014 EQUAL TO  
21 9.5 PERCENT. WHAT AVERAGE DCF COST OF EQUITY FOR  
22 DECEMBER 2014 DID YOU REPORT IN YOUR REBUTTAL TESTIMONY?

23 A. I reported an average DCF cost of equity at December 2014 equal to  
24 9.9 percent.



1 Q. YOU NOTE THAT STAFF ALSO USES INCORRECT INTEREST IN ITS  
2 2012 AND 2014 RISK PREMIUM STUDIES. HOW DO STAFF'S  
3 REPORTED INTEREST RATES COMPARE TO ACTUAL INTEREST  
4 RATES IN 2012 AND 2014?

5 A. In its 2012 risk premium studies, Staff uses a three-month average A-rated  
6 utility bond yield equal to 4.97 percent. However, the actual average interest  
7 rate for A-rated utility bonds for the three-month period ending April 2012 is  
8 4.41 percent, 56 basis points lower than the rate used by the Staff. In its May  
9 2014 risk premium studies, Staff uses a three-month A-rated average utility  
10 bond yield equal to 4.27 percent; however, the actual average interest rate for  
11 the three-month period ending May 2014 is 4.39 percent, 12 basis points  
12 higher than the rate used by Staff. (The correct monthly average A-rated  
13 utility bond yields are shown in my direct testimony, Schedule JWV-2.)

14 Q. WHAT EFFECT DOES STAFF'S USE OF AN INCORRECT INTEREST  
15 RATE THAT IS TOO HIGH IN 2012 AND TOO LOW IN 2014 HAVE ON  
16 STAFF'S ESTIMATE OF THE CHANGE IN EMPIRE'S EX ANTE RISK  
17 PREMIUM COST OF EQUITY FROM APRIL 2012 TO MAY 2014?

18 A. Staff's use of incorrect interest rates leads them to the false conclusion that  
19 the cost of equity has declined by 40 basis points from April 2012 to May  
20 2014. If Staff had used actual A-rated utility bond yield averages for the  
21 specified time periods, they would have found that the ex ante risk premium  
22 cost of equity did not decline from April 2012 to May 2014 (see TABLE 1 below).

**TABLE 1**  
**STAFF'S EX ANTE RISK PREMIUM ANALYSES USING CORRECTED INTEREST RATES**

<b>EX ANTE RISK PREMIUM</b>	<b>INTERCEPT COEFFICIENT+(1- SERIAL CORRELATION COEFFICIENT)</b>	<b>BOND COEFFICIENT</b>	<b>BOND YIELD</b>	<b>RISK PREMIUM</b>	<b>BOND YIELD</b>	<b>MODEL RESULT</b>					
Staff Calculation April 2012	8.22	-	-0.5863	*	4.97	=	5.31	+	4.97	=	10.3
Staff Calculation Corrected	8.22	-	-0.5863	*	<b>4.41</b>	=	5.63	+	<b>4.41</b>	=	<b>10.0</b>
Staff Calculation May 2014	8.16	-	-0.5864	*	4.27	=	5.66	+	4.27	=	9.9
Staff Calculation Corrected	8.16	-	-0.5864	*	<b>4.39</b>	=	5.59	+	<b>4.39</b>	=	<b>10.0</b>

1 **Q. WHAT EFFECT DOES STAFF'S USE OF AN INCORRECT INTEREST**  
 2 **RATE THAT IS TOO HIGH IN 2012 AND TOO LOW IN 2014 HAVE ON**  
 3 **STAFF'S ESTIMATE OF THE CHANGE IN EMPIRE'S EX POST COST OF**  
 4 **EQUITY FROM APRIL 2012 TO MAY 2014?**

5 A. Staff's use of incorrect interest rates in its ex post risk premium estimate also  
 6 leads them to the false conclusion that the cost of equity has declined by 40  
 7 basis points from April 2012 to May 2014. If Staff had used actual A-rated  
 8 utility bond yield averages for the specified time periods, they would have  
 9 found that the ex post risk premium cost of equity increased by 20 basis  
 10 points from April 2012 to May 2014, not decreased by 40 basis points.

11 **Q. DOES STAFF'S USE OF INCORRECT INTEREST RATES ON A-RATED**  
 12 **UTILITY BONDS ALSO AFFECT ITS ESTIMATE OF THE CHANGE IN**  
 13 **EMPIRE'S COST OF EQUITY FROM APRIL 2012 TO DECEMBER 2014?**

14 A. Yes. Based on its incorrect information regarding the yield on A-rated utility  
 15 bonds, Staff concludes that the cost of equity from the ex ante risk premium  
 16 method declined by 50 basis points from April 2012 to December 2014, and  
 17 that the cost of equity from the ex post risk premium method declined by 70  
 18 basis points over this period. If Staff had used correct rates on A-rated utility

1 bonds, it would have found that the cost of equity based on the ex ante and  
2 the ex post risk premium methods would have declined by only 20 basis  
3 points from April 2012 to December 2014.

4 **Q. STAFF ARGUES THAT ITS ANALYSES INDICATE THAT EMPIRE'S COST**  
5 **OF EQUITY HAS DECLINED BY APPROXIMATELY 40 TO 80 BASIS**  
6 **POINTS FROM APRIL 2012 TO DECEMBER 2014 (SEE STAFF**  
7 **SCHEDULE SG-1). CORRECTING ONLY FOR THE DATA ERRORS IN**  
8 **STAFF'S ANALYSES, WHAT DOES STAFF'S EVIDENCE IN FACT**  
9 **INDICATE REGARDING THE CHANGE IN EMPIRE'S COST OF EQUITY**  
10 **FROM APRIL 2012 TO DECEMBER 2014?**

11 A. Correcting only for the data errors in Staff's analyses, Staff would have found  
12 that the cost of equity may have declined by no more than 23 basis points (30  
13 basis points on the DCF, 20 basis points ex ante risk premium, 20 basis  
14 points ex post risk premium equals an average of 23 basis points). However,  
15 even this estimate of change is likely overstated because Staff's analyses do  
16 not, in fact, use my cost of equity methods as implemented in my direct and  
17 rebuttal testimonies. I further note that Empire recommends that their rates be  
18 set based on a cost of equity equal to 10.15 percent, a value that is at the low  
19 end of the range of my cost of equity estimates.

20 **III. RESPONSE TO MR. SCHAFER'S REBUTTAL**

21 **Q. WHAT TOPICS WILL YOU ADDRESS IN YOUR RESPONSE TO MR.**  
22 **SCHAFER'S REBUTTAL TESTIMONY?**

23 A. I will address Mr. Schafer's rebuttal comments on my: (1) DCF analysis;  
24 (2) Risk Premium analyses; and (3) CAPM analyses.

1                   **1.     DCF Analysis**

2   **Q.   WHAT OBJECTIONS DOES MR. SCHAFER HAVE TO YOUR DCF**  
3   **ANALYSIS OF EMPIRE’S COST OF EQUITY?**

4   A.   Mr. Schafer objects to my proxy selection criteria, my use of a quarterly DCF  
5       model, and my use of what, in his opinion, are “stale” stock prices.

6                   **2.     Proxy Selection Criteria**

7   **Q.   HOW DO YOU APPLY THE DCF APPROACH TO ESTIMATE EMPIRE’S**  
8   **COST OF EQUITY?**

9   A.   I apply the DCF approach to the Value Line electric utilities shown in  
10       Schedule JWV-1 of my direct testimony and Schedule JWV-3 of my rebuttal  
11       testimony.

12 **Q.   HOW DO YOU SELECT YOUR PROXY GROUP OF ELECTRIC UTILITIES?**

13 A.   I select all the companies in Value Line’s groups of electric companies that:  
14       (1) paid dividends during every quarter of the last two years; (2) did not  
15       decrease dividends during any quarter of the past two years; (3) have an  
16       I/B/E/S long-term growth forecast; and (4) are not the subject of a merger  
17       offer that has not been completed. In addition, each of the utilities included in  
18       my comparable groups has an investment grade bond rating and a Value Line  
19       Safety Rank of 1, 2, or 3.

20 **Q.   DOES MR. SCHAFER HAVE ANY OBJECTIONS TO YOUR PROXY**  
21 **SELECTION CRITERIA?**

22 A.   Yes. Mr. Schafer claims that my proxy selection criteria are incomplete  
23       because they do not require that a proxy company “receive at least 70% of its  
24       revenues from regulated electricity.” (Schafer at 6)

1 Q. WHAT COMPANIES DOES MR. SCHAFFER BELIEVE SHOULD BE  
2 ELIMINATED FROM YOUR PROXY GROUP BECAUSE THEY DO NOT  
3 RECEIVE AT LEAST 70 PERCENT OF REVENUES FROM REGULATED  
4 ELECTRIC OPERATIONS?

5 A. Mr. Schafer believes that nine Value Line electric utilities, including Black  
6 Hills, CMS Energy, DTE Energy, Integrys Energy, SCANA Corp., Sempra  
7 Energy, UIL Holdings, Vectren Corp. and Wisconsin Energy, should not be  
8 included in a proxy group to estimate Empire's cost of equity because they  
9 did not receive at least 70 percent of regulated revenues from electric  
10 operations (see TABLE 2 below—data from Schafer at 7)

11  
12  
13

**TABLE 2**  
**PERCENT REVENUES FROM REGULATED UTILITY OPERATIONS FOR**  
**COMPANIES MR. SCHAFFER RECOMMENDS ELIMINATING FROM PROXY GROUP**

COMPANY	SCHAFFER % REVENUES FROM REGULATED ELECTRIC OPERATIONS	SCHAFFER % REVENUES FROM REGULATED GAS OPERATIONS
Black Hills	49%	44%
CMS Energy Corp.	62%	33%
DTE Energy	45%	16%
Integrys Energy	18%	38%
SCANA Corp.	53%	21%
Sempra Energy	32%	42%
UIL Holdings	48%	52%
Vectren Corp.	24%	36%
Wisconsin Energy	68%	30%

14 Q. DO YOU AGREE WITH MR. SCHAFFER'S ARGUMENT THAT THE  
15 UTILITIES SHOWN ABOVE IN TABLE 2 SHOULD BE REMOVED FROM A  
16 PROXY GROUP BECAUSE THEY HAVE LESS THAN 70 PERCENT OF  
17 REVENUES FROM REGULATED ELECTRIC OPERATIONS?

18 A. No. Mr. Schafer implies that the companies shown above are not comparable  
19 in risk to Empire because they have less than 70 percent of revenues from

1 regulated electric operations. However, Mr. Schafer fails to recognize that  
 2 regulated electric utility and regulated gas utility operations are generally  
 3 comparable in risk. Further, Mr. Schafer's own data support the conclusion  
 4 that the nine companies he recommends eliminating from the proxy group  
 5 have an average of 79 percent of revenues from regulated electric and gas  
 6 utility operations. More importantly, there is convincing evidence that  
 7 investors view these nine Value Line electric utilities to be either comparable  
 8 in risk to Empire, or less risky than Empire. For example, the average Value  
 9 Line Safety Rank for these utilities is 2, and their average Standard & Poor's  
 10 bond rating is BBB+ (see TABLE 3 below). In addition, each of these nine  
 11 Value Line electric utilities has significantly higher market capitalization than  
 12 Empire. As I discuss in my direct testimony, investors generally view higher  
 13 market capitalization companies as having less risk than low market  
 14 capitalization companies such as Empire.

15 **TABLE 3**  
 16 **VALUE LINE SAFETY RANK, S&P BOND RATING, MARKET CAPITALIZATION, AND PERCENT**  
 17 **REVENUES FROM REGULATED UTILITY OPERATIONS FOR**  
 18 **COMPANIES MR. SCHAFER ELIMINATES FROM PROXY GROUP**

COMPANY	SAFETY RANK	S&P BOND RATING	S&P BOND RATING (NUMERICAL)	MARKET CAP \$ (MIL)	REVENUES FROM REGULATED ELECTRIC OPERATIONS	REVENUES FROM REGULATED GAS OPERATIONS	% REVENUES FROM REGULATED OPERATIONS
Black Hills	3	BBB	7	2,231	49%	44%	93%
CMS Energy Corp.	2	BBB+	7	9,743	62%	33%	95%
DTE Energy	2	BBB+	6	15,363	45%	16%	61%
Integrus Energy	2	A-	5	6,240	18%	38%	56%
SCANA Corp.	2	BBB+	6	8,700	53%	21%	74%
Sempra Energy	2	BBB+	6	27,269	32%	42%	74%
UIL Holdings	2	BBB	7	2,512	48%	52%	100%
Vectren Corp.	2	A-	5	3,904	24%	36%	60%
Wisconsin Energy	1	A-	5	12,092	68%	30%	98%
<b>Average</b>	<b>2</b>		<b>6</b>				<b>79%</b>
Empire	2	BBB	7	1,282			

1 **Q. DID YOUR INCLUSION OF THESE NINE VALUE LINE ELECTRIC**  
2 **UTILITIES BIAS YOUR DCF RESULTS UPWARD?**

3 A. No. In fact, the inclusion of these companies, which generally receive a high  
4 percentage of revenues from all regulated utility operations, is conservative.  
5 At the time of my direct testimony, the average DCF result for these electric  
6 utilities is 9.4 percent compared to the 10.0 percent average result for the  
7 proxy group; and the average DCF result for these electric utilities in the DCF  
8 analysis in my rebuttal testimony is 9.5 percent compared to the 9.9 percent  
9 average for the proxy group. Thus, the inclusion of the nine utilities in my DCF  
10 analysis is conservative.

11 **Q. MR. SCHAFFER ALSO ARGUES THAT YOUR PROXY GROUP SHOULD**  
12 **NOT HAVE INCLUDED CERTAIN COMPANIES BECAUSE OF MERGER**  
13 **AND ACQUISITION ACTIVITY. SPECIFICALLY, HE CONTENDS THAT**  
14 **YOU SHOULD NOT INCLUDE ANY COMPANY THAT HAS BEEN**  
15 **INVOLVED IN A "SIGNIFICANT MERGER OR ACQUISITION WITHIN THE**  
16 **LAST THREE YEARS." (SCHAFFER AT 10) DO YOU AGREE?**

17 A. No. I agree that a company should not be included in a proxy group if it is the  
18 subject of a merger offer that has not been completed because, in this case,  
19 there will be a mismatch between the information contained in the stock price  
20 component of the DCF cost of equity with the information contained in the  
21 growth component of the DCF cost of equity (see Vander Weide direct at 34).  
22 However, I disagree that there is a need to eliminate the acquiring company  
23 from the proxy group because the acquiring company's stock price and  
24 growth information are generally unaffected by the merger announcement  
25 until after a merger is completed. I also disagree with Mr. Schaffer's criterion

1 that a company should be eliminated from a proxy group for a period as long  
2 as three years after completion of merger activity. Once a merger has been  
3 completed, stock prices and growth rates both reflect investors' expectations  
4 for the new company's future growth. Mr. Schafer provides no evidence that  
5 there is a mismatch in the growth and stock price information for companies  
6 that have completed mergers for the last three years. Mr. Schafer's  
7 recommendation serves only to limit the size of a proxy group without any  
8 benefit to the reliability of cost of equity estimates.

9 **Q. WHAT COMPANIES DOES MR. SCHAFER ELIMINATE FROM YOUR**  
10 **COMPARABLE GROUP BECAUSE THEY HAVE BEEN INVOLVED IN**  
11 **MERGERS AND ACQUISITIONS OVER THE PAST THREE YEARS?**

12 A. Mr. Schafer argues that my proxy group should not have contained eleven  
13 companies, including Cleco Corporation, Hawaiian Electric/NextEra Energy,  
14 Integrys Energy/Wisconsin Energy, Dominion, Duke, Northeast Utilities (now  
15 Eversource Energy), OGE Energy, SCANA Corporation, and TECO Holdings.

16 **Q. DO YOU AGREE THAT YOU SHOULD NOT HAVE INCLUDED THESE**  
17 **COMPANIES IN YOUR PROXY GROUP?**

18 A. No. First, as I discuss above and in my direct testimony, I do not believe it is  
19 necessary to exclude a company from a proxy group if it is the acquiring  
20 company because typically it is the company that is being acquired that is  
21 subject to stock price effects, not the acquiring company.

22 Second, several of these transactions were announced after I  
23 performed my studies; and the announcements were made after the period  
24 included in my capital market studies. It is difficult to understand why Mr.  
25 Schafer believes that I would have knowledge in advance of transactions that



1 had not yet been announced. For example, the acquisition of Cleco  
2 Corporation was announced October 20, 2014; the Hawaiian Electric  
3 acquisition by NextEra Energy was announced December 3, 2014; and the  
4 Integrys Energy acquisition by Wisconsin Energy was announced on June 23,  
5 2014.

6 **Q. DID YOUR INCLUSION OF COMPANIES THAT MR. SCHAFER**  
7 **CONTENDS SHOULD BE ELIMINATED FROM YOUR PROXY GROUP**  
8 **BIAS YOUR AVERAGE DCF RESULT UPWARD?**

9 A. No. The eleven companies that Mr. Schafer wants to eliminate from my proxy  
10 group because of their involvement in mergers and acquisitions over the past  
11 three years have an average DCF result equal to 9.4 percent, lower than the  
12 average DCF result of 10.0 percent for the whole group.

13 **Q. MR. SCHAFER ALSO SUGGESTS THAT PG&E SHOULD BE EXCLUDED**  
14 **FROM A PROXY COMPANY GROUP BECAUSE OF "SIGNIFICANT**  
15 **UNRESOLVED COSTS RELATING TO THE EXPLOSION OF A PIPELINE**  
16 **IN SAN BRUNO, CALIFORNIA." DO YOU AGREE?**

17 A. No. Mr. Schafer's suggestion implies that PG&E is significantly more risky  
18 than the proxy group on average or Empire in particular. Mr. Schafer fails to  
19 recognize that Empire also faces the ongoing challenge of making substantial  
20 investments going forward of making substantial investments to comply with  
21 environmental requirements and that Empire is significantly smaller than  
22 PG&E.

1                                   **3.     Quarterly DCF Model**

2   **Q.   WHY DOES MR. SCHAFFER DISAGREE WITH YOUR USE OF A**  
3   **QUARTERLY DCF MODEL TO ESTIMATE EMPIRE’S COST OF EQUITY?**

4   A.   Mr. Schaffer claims that my use of a quarterly DCF model is inappropriate  
5       because it “unreasonably assumes that dividends should be increased to  
6       account for the period of time remaining in the year after the investor receives  
7       them.” (Schaffer at 18)

8   **Q.   DO YOU AGREE WITH MR. SCHAFFER’S ASSERTION THAT THE**  
9   **QUARTERLY DCF MODEL ASSUMES THAT THE ELECTRIC UTILITY**  
10 **MUST “COMPENSATE INVESTORS FOR THE PERIOD OF TIME**  
11 **REMAINING IN THE YEAR AFTER THE DIVIDEND HAS BEEN PAID TO**  
12 **THE INVESTOR” (SCHAFFER AT 15)?**

13 A.   No. The quarterly DCF model is based on the underlying assumption of all  
14       DCF models that a company’s stock price is equal to the present value of the  
15       expected stream of dividends investors expect to receive from their  
16       investment in the company. Because the present value of a stream of cash  
17       flows (that is, dividends) depends on both the timing and the magnitude of the  
18       expected cash flows, a company’s stock price will also depend on both the  
19       timing and the magnitude of the expected cash flows. As I demonstrate in my  
20       direct testimony, Appendix 3, the quarterly DCF model must be used to  
21       estimate Empire’s cost of equity because all my proxy companies pay  
22       dividends quarterly; and the quarterly DCF model is the only DCF model that  
23       appropriately equates the company’s stock price to the present value of  
24       expected future dividends when dividends are paid quarterly. In contrast, Mr.

1 Schafer's annual DCF model will only satisfy the underlying assumption of all  
2 DCF models if dividends are paid annually.

3 **Q. IS YOUR USE OF THE QUARTERLY DCF MODEL A SIGNIFICANT**  
4 **FACTOR IN EXPLAINING THE DIFFERENCE BETWEEN YOUR AND MR.**  
5 **SCHAFER'S ESTIMATES OF THE COST OF EQUITY?**

6 A. No. For example, the difference between the average result of my quarterly  
7 DCF model presented in my direct testimony and the average result for a  
8 correctly applied annual model is only 6 basis points.

9 **4. "Stale" Stock Prices**

10 **Q. MR. SCHAFER CRITICIZES YOUR DCF STUDIES BECAUSE, IN HIS**  
11 **OPINION, YOU USED STOCK PRICE DATA THAT WERE THREE TO SIX**  
12 **MONTHS OLD WHEN YOU PREPARED YOUR DIRECT TESTIMONY. IS**  
13 **HIS CRITICISM JUSTIFIED?**

14 A. No. Empire asked me to prepare cost of equity studies for this proceeding in  
15 June 2014. I therefore based my studies on the most recent capital market  
16 data available at the time, the three-month period ending May 31, 2014. I  
17 provided testimony to the Company in early July, and the affidavit for my  
18 testimony was notarized on August 13, 2015. It is unreasonable for Mr.  
19 Schafer to expect that a rate filing could be prepared and finalized to  
20 incorporate up to the last minute data.

21 **5. Forecasted Interest Rates**

22 **Q. MR. SCHAFER CRITICIZES YOUR USE OF FORECASTED INTEREST**  
23 **RATES BECAUSE HE ARGUES THAT FORECASTS "HAVE CHANGED**  
24 **SIGNIFICANTLY SINCE THE TIME" YOU FILED YOUR TESTIMONY.**

1 (SCHAFFER AT 22) HAS THE PATTERN OF INTEREST RATE  
2 FORECASTS “CHANGED SIGNIFICANTLY SINCE THE TIME” YOU FILED  
3 YOUR TESTIMONY?

4 A. No. Although the Interest rate forecasts have declined slightly since May  
5 2014, interest rates are still expected to increase in the next several years  
6 (see TABLE 4 below).

**TABLE 4**  
**INTEREST RATE FORECASTS MAY 2014, DECEMBER 2014, AND FEBRUARY 2015**

<b>VALUE LINE SELECTION &amp; OPINION, MAY 23, 2014</b>	2015	2016	2017	2018	<b>AVERAGE</b>
Aaa-rated Corporate Forecast	4.80%	5.50%	5.80%	6.00%	<b>5.5%</b>
10-Year Treasury Note Forecast	3.30%	3.80%	4.30%	4.50%	<b>4.0%</b>
<b>Value Line Selection &amp; Opinion, November 20, 2015</b>	2015	2016	2017	2018	
Aaa-rated Corporate Forecast	4.60%	5.20%	5.50%	5.50%	<b>5.2%</b>
10-Year Treasury Note Forecast	3.40%	3.80%	4.00%	4.00%	<b>3.8%</b>
<b>Value Line Selection &amp; Opinion, February 20, 2015</b>	2016	2017	2018	2019	
Aaa-rated Corporate Forecast	4.60%	5.30%	5.50%	5.50%	<b>5.2%</b>
10-Year Treasury Note Forecast	3.20%	3.70%	4.00%	4.30%	<b>3.8%</b>
<b>Energy Information Administration</b>	2016	2017	2018	2019	
10-Year Treasury Note Forecast EIA	3.56%	4.03%	4.16%	4.15%	<b>4.0%</b>
AA Utility Bond Rate Forecast – EIA	5.75%	6.39%	6.58%	6.60%	<b>6.3%</b>

7 **6. Risk Premium Analyses**

8 **Q. PLEASE DESCRIBE THE RISK PREMIUM METHOD OF ESTIMATING**  
9 **EMPIRE’S COST OF EQUITY.**

10 A. The risk premium method is based on the principle that investors expect to  
11 earn a return on an equity investment in Empire that reflects a “premium” over  
12 and above the return they expect to earn on an investment in a portfolio of  
13 bonds. This equity risk premium compensates equity investors for the  
14 additional risk they bear in making equity investments versus bond  
15 investments.

1 Q. HOW DO YOU MEASURE THE REQUIRED RISK PREMIUM ON AN  
2 EQUITY INVESTMENT IN EMPIRE?

3 A. I use two methods to estimate the required risk premium on an equity  
4 investment in Empire. The first is called the ex ante risk premium method and  
5 the second is called the ex post risk premium method.

6 Q. DOES MR. SCHAFFER AGREE WITH YOUR EX ANTE RISK PREMIUM  
7 ESTIMATE OF EMPIRE'S COST OF EQUITY?

8 A. No. Mr. Schaffer has three disagreements with my ex ante risk premium  
9 estimates of Empire's cost of equity. First, he argues that I should have  
10 recognized that Value Line updated its forecast of the yield to maturity on  
11 long-term bonds in November 2014. Second, he argues that I should have  
12 used the average of Value Line's interest rate forecasts for the years 2015 to  
13 2018 rather than using the interest rate forecast for 2018. Third, he argues  
14 that my estimate of the required risk premium is based on a relatively small  
15 set of electric utilities.

16 Q. WAS VALUE LINE'S NOVEMBER 2014 FORECAST OF LONG-TERM  
17 INTEREST RATES AVAILABLE AT THE TIME YOU PREPARED YOUR  
18 DIRECT TESTIMONY?

19 A. No. At the time I prepared my direct testimony, Value Line's most recent  
20 interest rate forecast was dated May 23, 2014.

21 Q. DID VALUE LINE LOWER ITS FORECAST OF LONG-TERM INTEREST  
22 RATES IN THE NOVEMBER 21, 2014 EDITION OF VALUE LINE'S  
23 SELECTION & OPINION?

24 A. Yes. Value Line reduced its forecast of long-term interest rates by 20 to 50  
25 basis points compared to the May 2014 forecasts.

1 Q. DOES THE RISK PREMIUM COMPONENT OF THE EX ANTE RISK  
2 PREMIUM APPROACH DEPEND ON THE LEVEL OF INTEREST RATES?

3 A. Yes. As I discuss in my direct testimony, Appendix 3, I provide empirical  
4 evidence that the ex ante risk premium moves inversely with interest rates.  
5 Specifically, I provide evidence that the ex ante risk premium tends to  
6 increase by approximately 60 basis points when interest rates decline by 100  
7 basis points. For example, if the forecasted bond yield declines by 50 basis  
8 points, the cost of equity would decline by 20 basis points, because the  
9 required risk premium would increase by 30 basis points.

10 Q. MR. SCHAFER ALSO CRITICIZES YOUR EX ANTE RISK PREMIUM  
11 ANALYSIS BECAUSE IT IS BASED ON A RELATIVELY SMALL SET OF  
12 TEN TO TWENTY ELECTRIC UTILITIES. IS MR. SCHAFER'S CRITICISM  
13 JUSTIFIED?

14 A. No. Mr. Schafer fails to recognize that in my ex ante risk premium analysis, as  
15 I explain in my direct testimony, I use the Moody's group of twenty-four  
16 electric companies as my proxy group because they were a widely followed  
17 group of electric utilities, and using this constant group greatly simplifies the  
18 data collection task required to estimate the ex ante risk premium over the  
19 nearly 15-year period of my study (see Vander Weide direct testimony,  
20 Appendix 3). Simplifying the data collection task is desirable because the ex  
21 ante risk premium approach requires that the DCF model be estimated for  
22 every company in every month of the study period.

23 Mr. Schafer also fails to recognize that as time passes, in each month  
24 of the analysis different companies may be included or may drop out due to  
25 mergers and acquisitions or due to lack of data required to perform a DCF

1 analysis (for example, lack of long-term growth estimate, or reduction or  
2 elimination of dividend payment). Given the number of mergers in the electric  
3 utility industry over the past fifteen years, it is not surprising that there are  
4 now fewer companies in the sample than in earlier periods.

5 **Q. YOU NOTE THAT MR. SCHAFFER CRITICIZES YOUR EX ANTE RISK**  
6 **PREMIUM ANALYSIS BECAUSE IT INCLUDES ONLY TEN TO TWENTY**  
7 **ELECTRIC UTILITIES. HOW MANY ELECTRIC UTILITIES DOES MR.**  
8 **SCHAFFER RECOMMEND INCLUDING IN HIS DCF ANALYSIS?**

9 A. Mr. Schaffer recommends including only eight electric utilities in his DCF  
10 analysis.

11 **Q. IS IT REASONABLE FOR MR. SCHAFFER TO CRITICIZE YOUR EX ANTE**  
12 **ANALYSIS BECAUSE IT IS BASED ON A GROUP OF TEN TO TWENTY**  
13 **ELECTRIC UTILITIES, WHEN HIS OWN RECOMMENDED PROXY GROUP**  
14 **CONTAINS ONLY EIGHT UTILITIES?**

15 A. No.

16 **Q. WHAT IS THE MAJOR BENEFIT OF YOUR EX ANTE RISK PREMIUM**  
17 **STUDY IN DETERMINING A COMPANY'S APPROPRIATE ALLOWED**  
18 **RETURN ON EQUITY?**

19 A. The major benefit of my ex ante risk premium study is that it provides  
20 information on the relationship between required risk premium and changes in  
21 interest rates. When interest rates are declining, the impact of lower interest  
22 rates on a company's cost of equity cannot be simply measured by the  
23 change in interest rates—the estimate of the cost of equity must also include  
24 the change in the risk premium that occurs when interest rates change. My  
25 studies indicate that the required risk premium changes in the opposite

1 direction of interest rate changes, and that the change is more than half of the  
 2 magnitude of the change interest rates.

3 **Q. MR. SCHAFER ATTEMPTS TO UPDATE YOUR EX ANTE RISK PREMIUM**  
 4 **COST OF EQUITY USING A FORECASTED INTEREST RATE EQUAL TO**  
 5 **5.3 PERCENT. WHAT EX ANTE RISK PREMIUM RESULT DOES HE**  
 6 **REPORT?**

7 A. Mr. Schafer reports an ex ante risk premium cost of equity equal to  
 8 9.7 percent.

9 **Q. WHAT RISK PREMIUM DID MR. SCHAFER USE TO OBTAIN HIS**  
 10 **9.7 PERCENT RESULT?**

11 A. Mr. Schafer used the 4.4 percent risk premium I report in my direct testimony.  
 12 However, Mr. Schafer fails to recognize that the 4.4 percent ex ante risk  
 13 premium depends on the level of the interest rate, which in my direct  
 14 testimony was 6.4 percent, not 5.3 percent.

15 **Q. HAS MR. SCHAFER CORRECTLY ESTIMATED THE EX ANTE RISK**  
 16 **PREMIUM COST OF EQUITY?**

17 A. No. Mr. Schafer fails to recognize that the ex ante risk premium changes in  
 18 the opposite direction of the change in the bond yield. Using a bond yield  
 19 equal to 5.3 percent and the ex ante risk premium coefficients in my direct  
 20 testimony, Mr. Schafer should have obtained a result 70 basis points higher,  
 21 10.4 percent (see TABLE 5 below).

**TABLE 5**  
**EX ANTE RISK PREMIUM COST OF EQUITY ESTIMATE USING MR. SCHAFER'S 5.3 PERCENT INTEREST RATE**

EX ANTE RISK PREMIUM	INTERCEPT COEFFICIENT+(1-SERIAL CORRELATION COEFFICIENT)		BOND COEFFICIENT	*	BOND YIELD	=	RISK PREMIUM	+	BOND YIELD	=	MODEL RESULT
Schafer Bond Yield	8.16	-	-0.5864	*	5.30	=	5.05	+	5.30	=	10.4



1                                   **7. CAPM Analysis**

2   **Q. WHAT CONCERNS DOES MR. SCHAFER HAVE REGARDING YOUR**  
3   **CAPM ANALYSIS OF EMPIRE'S COST OF EQUITY?**

4   A. Mr. Schafer cites three concerns. First, he argues that my statement that the  
5   CAPM underestimates the cost of equity is unfounded. Second, he argues  
6   that my forecasted risk-free rate is inappropriate. Third, he argues that my risk  
7   premium estimates are exaggerated. (Schafer at 30)

8   **Q. WHY DOES MR. SCHAFER BELIEVE THAT YOUR STATEMENT THAT**  
9   **THE CAPM UNDERESTIMATES THE COST OF EQUITY IS UNFOUNDED?**

10  A. Mr. Schafer asserts that my statement is unfounded because my supporting  
11  evidence relates to CAPM estimates based on unadjusted betas, whereas his  
12  and my CAPM studies are based on adjusted betas.

13  **Q. DO YOU AGREE WITH MR. SCHAFER'S ASSERTION THAT YOUR**  
14  **EVIDENCE DOES NOT SUPPORT YOUR CONCLUSION THAT THE CAPM**  
15  **UNDERESTIMATES THE COST OF EQUITY FOR COMPANIES WITH**  
16  **BETAS LESS THAN 1.0?**

17  A. No. Mr. Schafer fails to recognize that my cited studies find that the difference  
18  between the forecasted returns of the CAPM and actual stock market returns  
19  are far larger than can be explained by the difference between adjusted and  
20  unadjusted betas. In short, my cited studies demonstrate that the CAPM  
21  underestimates the cost of equity for companies with betas less than 1.0,  
22  regardless of whether adjusted or unadjusted betas are used in the CAPM.

1 **Q. DO YOU AGREE WITH MR. SCHAFER'S ARGUMENT THAT YOUR**  
2 **FORECASTED RISK-FREE RATE IS INAPPROPRIATE?**

3 A. No. My forecasted risk-free rate was certainly appropriate at the time of my  
4 direct evidence in this proceeding, and the impact of the relatively small  
5 change in the forecasted risk-free rate that has occurred since the time of my  
6 direct testimony is mitigated by the evidence that the required risk premium  
7 moves in the opposite direction of any change in the risk-free rate.

8 **Q. MR. SCHAFER ALSO ARGUES THAT YOUR ESTIMATES OF THE RISK**  
9 **PREMIUM COMPONENT OF THE CAPM ARE "EXAGGERATED."**  
10 **(SCHAFER AT 32) WHY DOES HE BELIEVE YOUR RISK PREMIUM**  
11 **ESTIMATES ARE "EXAGGERATED"?**

12 A. Mr. Schafer believes that my risk premium estimates are "exaggerated"  
13 because, in my historical CAPM analysis, I calculate the risk premium by  
14 subtracting the income return on long-term Treasury bonds from the historical  
15 return on the S&P500; and in my DCF-based CAPM, I calculate the estimated  
16 DCF return of only those companies in the S&P500 that pay dividends.

17 **Q. WHY DO YOU CALCULATE YOUR HISTORICAL RISK PREMIUM BY**  
18 **SUBTRACTING THE INCOME RETURN ON LONG-TERM TREASURY**  
19 **BONDS, RATHER THAN THE TOTAL RETURN ON BONDS, FROM THE**  
20 **HISTORICAL RETURN ON THE S&P500?**

21 A. I use this procedure because the CAPM requires an estimate of the risk-free  
22 rate, and the income return on long-term Treasury bonds is the only return on  
23 Treasury bonds that is risk free. The total return on bonds is highly risky  
24 because it reflects capital gains and losses as well as interest.

1 Q. MR. SCHAFFER ARGUES THAT THE “INCOME RETURN IS NOT A  
2 VIABLE OPTION FOR INVESTORS” BECAUSE THEY “MUST PURCHASE  
3 THE SECURITY IF THEY WANT TO TAKE ADVANTAGE OF THE  
4 COUPON PAYMENT.” (SCHAFFER AT 32) DO YOU AGREE?

5 A. No. Because long-term government bonds are generally sold at par, investors  
6 can earn the income return on the bond by holding the bond to maturity.

7 Q. DO YOU AGREE WITH MR. SCHAFFER’S ARGUMENT THAT YOUR DCF-  
8 BASED CAPM RISK PREMIUM IS “EXAGGERATED” BECAUSE YOU  
9 ESTIMATE THE DCF RETURN ONLY FOR THOSE COMPANIES IN THE  
10 S&P500 THAT PAY DIVIDENDS?

11 A. No. Mr. Schaffer fails to recognize that a DCF return cannot be calculated for  
12 a company that does not pay a dividend because, under the DCF assumption  
13 of constant growth, companies with zero dividends will always have zero  
14 dividends.

15 Q. DOES YOUR EXCLUSION OF COMPANIES THAT DO NOT PAY  
16 DIVIDENDS CAUSE YOUR RISK PREMIUM ESTIMATE TO BE  
17 “EXAGGERATED”?

18 A. No.

19 Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

20 A. Yes, it does.

21 .

**SURREBUTTAL SCHEDULE JWV-1  
STAFF 2012 DISCOUNTED CASH FLOW ANALYSIS  
WITH CORRECTED DIVIDEND PAYMENTS**

LINE	COMPANY	CORRECTED MOST RECENT QUARTERLY DIVIDEND (D <sub>0</sub> )	STOCK PRICE P <sub>0</sub>	FORECAST OF FUTURE EARNINGS GROWTH	STAFF DCF MODEL RESULT FILED, INCORRECT DIVIDENDS	CORRECTED DCF MODEL RESULT
1	Alliant Energy	0.450	43.208	6.23%	10.7%	10.7%
2	Amer. Elec. Power	0.470	38.380	3.19%	8.4%	8.4%
3	Centerpoint Energy	0.203	19.320	3.94%	8.4%	8.3%
4	CMS Energy Corp.	0.240	21.872	6.06%	10.6%	10.6%
5	Consolidated Edison	0.605	58.328	4.06%	8.5%	8.5%
6	Dominion Resources	0.528	50.820	5.16%	9.5%	9.5%
7	DTE Energy	0.588	54.735	4.50%	9.2%	9.1%
8	Duke Energy	0.250	21.042	4.54%	20.5%	9.7%
9	G't Plains Energy	0.213	20.075	5.48%	10.1%	10.1%
10	Northeast Utilities	0.294	36.212	6.72%	10.3%	10.1%
11	NorthWestern Corp.	0.370	35.062	5.50%	10.1%	10.0%
12	OGE Energy	0.393	52.648	6.23%	7.8%	9.4%
13	PG&E Corp.	0.455	42.457	2.37%	6.9%	6.9%
14	Pinnacle West Capital	0.525	47.345	5.73%	10.6%	10.6%
15	PNM Resources	0.145	18.273	12.42%	15.9%	15.8%
16	Portland General	0.265	25.020	4.96%	9.6%	9.6%
17	SCANA Corp.	0.495	44.910	4.38%	9.1%	9.1%
18	Sempra Energy	0.600	59.987	5.38%	9.3%	9.1%
19	Southern Co.	0.490	44.827	5.36%	10.0%	10.0%
20	TECO Energy	0.220	17.710	5.39%	10.8%	10.7%
21	UIL Holdings	0.432	34.740	4.53%	9.9%	9.9%
22	Westar Energy	0.330	27.873	5.77%	10.9%	10.9%
23	Xcel Energy Inc.	0.260	26.522	5.12%	9.4%	9.4%
24	<b>Staff 2012 Average</b>				10.3%	<b>9.8%</b>

AFFIDAVIT OF JAMES H. VANDER WEIDE

STATE OF NORTH CAROLINA )  
  ) ss  
COUNTY OF DURHAM                                  )

On the 19<sup>th</sup> day of March, 2015, before me appeared James H. Vander Weide, to me personally known, who, being by me first duly sworn, states that he is President of Financial Strategy Associates and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

James H. Vander Weide  
James H. Vander Weide

Subscribed and sworn to before me this 19<sup>th</sup> day of March, 2015.

Sandra W. Bumpers  
Notary Public

My commission expires: 05-30-2018

