Exhibit No.	
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Witness:	James H. Vander Weide
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Case No.	ER-2012-0345
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Before the Public Service Commission of the State of Missouri

Surrebuttal Testimony

of

James H. Vander Weide, Ph.D.

January 2013

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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-2012-0345

1 **I. INTRODUCTION**

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

3 A. My name is James H. Vander Weide. I am Research Professor of Finance
4 and Economics at Duke University, the Fuqua School of Business. I am also
5 President of Financial Strategy Associates, a firm that provides strategic and
6 financial consulting services to business clients. My business address is
7 3606 Stoneybrook Drive, Durham, North Carolina 27705.

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

11 A. Yes, I am.

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

13 A. I have been asked by The Empire District Electric Company ("Empire" or "the
14 Company") to review the rebuttal testimony filed in this proceeding by the
15 Staff of the Commission ("Staff").

16 **Q. WHAT TOPICS DO YOU ADDRESS IN YOUR SURREBUTTAL**
17 **TESTIMONY?**

18 A. I address Staff's rebuttal comments, as set forth in the rebuttal testimony of
19 Staff witness Shana Atkinson ("Staff Rebuttal") regarding: (1) my comparable

1 companies; (2) DCF growth rates; (3) the use of forecasted interest rates; and
2 (4) tests of reasonableness.

3 **II. <u>COMPARABLE COMPANIES</u>**

4 **Q. WHY DO ECONOMISTS ESTIMATE A COMPANY'S COST OF EQUITY**
5 **FROM COMPARABLE COMPANY DATA RATHER THAN SOLELY FROM**
6 **MARKET DATA FOR THE COMPANY OF INTEREST?**

7 A. Economists estimate a company's cost of equity from market data for
8 comparable companies because the result of applying cost of equity methods
9 such as the discounted cash flow ("DCF"), risk premium, and Capital Asset
10 Pricing Model ("CAPM") to a single company is highly uncertain. However, as
11 I explain in my rebuttal testimony, the uncertainty in estimating the cost of
12 equity by applying cost of equity models to a single company can be
13 significantly reduced by applying cost of equity models to a relatively large
14 group of comparable risk companies. Intuitively, any over- and under-estimate
15 of the cost of equity that arises from the application of cost of equity methods
16 to a single company is averaged out by applying the methods to a larger
17 group of comparable risk companies.

18 **Q. WHAT PROXY GROUP OF ELECTRIC UTILITIES DO YOU USE FOR THE**
19 **PURPOSE OF ESTIMATING EMPIRE'S COST OF EQUITY?**

20 A. I use the group of twenty-four electric utilities shown in Schedule JVW-1 of my
21 direct testimony.

22 **Q. WHAT CRITERIA DO YOU USE TO SELECT PROXY COMPANIES?**

23 A. As described in my direct testimony, I select all the companies in Value Line's
24 groups of electric utilities that: (1) paid dividends during every quarter of the

1 last two years; (2) did not decrease dividends during any quarter of the past
2 two years; (3) had at least two analysts included in the I/B/E/S mean growth
3 forecast; (4) have an investment grade bond rating and a Value Line Safety
4 Rank of 1, 2, or 3; and (5) are not the subject of a merger offer that has not
5 been completed.

6 **Q. DOES STAFF AGREE WITH YOUR COMPARABLE COMPANY**
7 **SELECTION CRITERIA?**

8 A. No. Staff claims that I should have required that my comparable companies
9 have at least seventy percent of revenues from regulated electric operations
10 and be included in the Edison Electric Institute's ("EEI's") regulated utility
11 category (Staff Rebuttal at 11).

12 **Q. WHY DOES STAFF BELIEVE THAT THE CRITERION THAT**
13 **COMPARABLE COMPANIES HAVE AT LEAST SEVENTY PERCENT**
14 **REVENUES FROM REGULATED ELECTRIC OPERATIONS IS**
15 **IMPORTANT?**

16 A. Staff believes that this criterion is important because, in its opinion, the
17 objective is to select a comparable group of "pure play" electric utilities:

> 18 The objective of selecting a comparable group is to find companies
> 19 that are as "pure play" as possible. "Pure play" means that the
> 20 comparable company is confined, as much as possible, to the
> 21 operation that is the subject of the cost-of capital study. (Staff
> 22 Rebuttal at 10.)

23 **Q. DO YOU AGREE WITH STAFF'S ASSERTION THAT THE PURPOSE OF**
24 **COMPARABLE COMPANY SELECTION CRITERIA IS TO FIND**
25 **COMPANIES THAT ARE AS "PURE PLAY" AS POSSIBLE?**

1 A. No. The purpose of comparable company selection criteria is to select the
2 largest possible group of comparable risk companies that have sufficient data
3 to estimate the cost of equity. The emphasis on comparable risk is important
4 because investors require the same rate of return on investments in the target
5 company as on other investments of comparable risk. The emphasis on
6 having as large a proxy group as possible is important because, as discussed
7 above, the uncertainty of the results from applying cost of equity methods to a
8 small group of companies can be reduced by applying cost of equity methods
9 to a relatively large group of comparable risk companies.

10 **Q. DOES STAFF PROVIDE ANY EVIDENCE THAT ELECTRIC UTILITIES**
11 **WITH LESS THAN SEVENTY PERCENT REVENUES FROM REGULATED**
12 **ELECTRIC OPERATIONS ARE MORE RISKY THAN ELECTRIC UTILITIES**
13 **WITH GREATER THAN SEVENTY PERCENT REVENUES FROM**
14 **REGULATED ELECTRIC OPERATIONS?**

15 A. No.

16 **Q. DO YOU PROVIDE EVIDENCE IN YOUR REBUTTAL TESTIMONY THAT**
17 **THE VALUE LINE ELECTRIC UTILITIES WITH LESS THAN SEVENTY**
18 **PERCENT REVENUES FROM REGULATED ELECTRIC OPERATIONS, IN**
19 **FACT, HAVE APPROXIMATELY THE SAME RISK AS THE VALUE LINE**
20 **ELECTRIC UTILITIES WITH GREATER THAN SEVENTY PERCENT**
21 **REVENUES FROM REGULATED ELECTRIC OPERATIONS?**

22 A. Yes. I demonstrate in my rebuttal testimony that the electric utilities that Staff
23 excludes because they have less than seventy percent revenues from
24 regulated electric operations have the same average risk, as measured by

1 Value Line Safety Rank and Standard & Poor's bond ratings, as those
2 companies that Staff includes because they have greater than seventy
3 percent revenues from regulated electric operations (see Vander Weide
4 Rebuttal at 9 and Rebuttal Schedule JVW-2).

5 **Q. STAFF ALSO CLAIMS THAT YOU SHOULD HAVE EXCLUDED ELECTRIC**
6 **UTILITIES THAT EEI CLASSIFIES AS "MOSTLY REGULATED" RATHER**
7 **THAN AS "REGULATED."[1] DO YOU PROVIDE EVIDENCE IN YOUR**
8 **REBUTTAL TESTIMONY REGARDING THE RELATIVE RISKS OF EEI'S**
9 **"MOSTLY REGULATED" AND "REGULATED" ELECTRIC UTILITY**
10 **COMPANIES?**

11 A. Yes. I demonstrate in my rebuttal testimony that the electric utilities in EEI's
12 "mostly regulated" category have the same average Value Line Safety Rank
13 and Standard & Poor's bond rating as the electric utilities in EEI's "regulated"
14 category (Vander Weide at 8 and Rebuttal Schedule JVW-1).

15 **Q. IS IT EASY TO QUANTIFY HOW MUCH OF A COMPANY'S BUSINESS IS**
16 **REGULATED?**

17 A. No. Staff fails to recognize that it is quite difficult to quantify the percentage of
18 a company's business that is "regulated." Ideally, one would measure percent
19 regulated versus percent non-regulated based on the market values of a
20 company's regulated and non-regulated businesses. However, since a

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1 As described in my rebuttal testimony, EEI classifies its electric utility members into three groups based on its estimate of the percentage of a company's total assets that are regulated. The three groups include: (1) "regulated" utilities--regulated assets greater than 80 percent of total assets; (2) "mostly regulated"--regulated assets between 50 percent and 80 percent of total assets; and (3) "diversified"--regulated assets less than 50 percent of total assets.

1 company's individual business segments are not market traded, there is no
2 market value for these business segments. Although an analyst might attempt
3 to quantify "percent regulated" and "percent unregulated" using accounting
4 variables such as assets or revenues as a substitute for market values, these
5 accounting categories are imperfect because the accounting for regulated
6 assets and revenues is likely not comparable from one company to another,
7 and accounting values are imperfect indicators of market values.

8 **Q. HOW DOES THE AVERAGE RISK OF YOUR COMPARABLE GROUP OF**
9 **TWENTY-FOUR ELECTRIC UTILITIES COMPARE TO THE AVERAGE**
10 **RISK OF STAFF'S PROXY GROUP OF TEN ELECTRIC UTILITIES?**

11 A. As I discuss in my rebuttal testimony, my comparable group of twenty-four
12 electric utilities has the same investment risk as Staff's proxy group of ten
13 electric utilities. For example, the average S&P bond rating for both my large
14 proxy electric group and Staff's smaller group of electric companies is BBB+,
15 and the average Value Line Safety Rank for both groups is 2.

16 **Q. WHAT CONCLUSION DO YOU DRAW FROM THE EVIDENCE THAT**
17 **STAFF'S ADDITIONAL SELECTION CRITERIA RELATING TO PERCENT**
18 **OF REGULATED ELECTRIC REVENUES AND EEI CATEGORY DO NOT**
19 **REDUCE THE RISK OF STAFF'S PROXY GROUP COMPARED TO YOUR**
20 **COMPARABLE GROUP?**

21 A. I conclude that the Commission should rely on my proxy group to estimate
22 Empire's cost of equity. As I have demonstrated, my proxy group has similar
23 investment risk, but includes a significantly larger sample of companies than
24 Staff's proxy group. Since one can obtain more accurate estimates of the cost

1 of equity by using a larger sample of comparable risk companies, the
2 Commission should rely on my proxy companies to estimate Empire's cost of
3 equity.

4 **III. <u>DCF MODEL GROWTH RATE</u>**

5 **Q. THE DCF COST OF EQUITY DEPENDS ON ESTIMATES OF THE**
6 **DIVIDEND YIELD AND INVESTORS' GROWTH EXPECTATIONS. HOW DO**
7 **YOU ESTIMATE INVESTORS' GROWTH EXPECTATIONS IN YOUR DCF**
8 **ANALYSES?**

9 A. I use the average analysts' estimates of future earnings per share ("EPS")
10 growth reported by I/B/E/S Thomson Reuters.

11 **Q. WHY DO YOU USE THE AVERAGE ANALYSTS' EPS GROWTH RATE**
12 **FORECASTS REPORTED BY I/B/E/S THOMSON REUTERS?**

13 A. I use the I/B/E/S growth forecasts because my studies indicate that the
14 analysts' growth forecasts are more highly correlated with stock prices than
15 other indicators of future growth. This result is consistent with the hypothesis
16 that investors use analysts' growth forecasts in making stock buy and sell
17 decisions.

18 **Q. DOES STAFF AGREE WITH YOUR USE OF THE AVERAGE ANALYSTS'**
19 **EPS GROWTH FORECAST IN THE DCF MODEL AS A PROXY FOR**
20 **INVESTORS' GROWTH EXPECTATIONS?**

21 A. No. Staff argues that the average analysts' growth forecast is unsustainable
22 in the long run (Staff Rebuttal at 12).

23 **Q. WHAT IS STAFF'S ESTIMATE OF THE LONG RUN SUSTAINABLE**
24 **GROWTH RATE FOR ELECTRIC UTILITIES?**

1 A. Staff claims that the long run sustainable growth rate for electric utilities is
2 currently 3.5 percent (Staff Rebuttal at 16 – 17). Staff arrives at its estimate of
3 long-term growth by examining data on the rolling ten-year average growth
4 rates in DPS, EPS, and BPS for Central region electric utilities from 1968
5 through 1999.

6 **Q. DO YOU AGREE WITH STAFF'S RELIANCE ON THE ROLLING TEN-**
7 **YEAR AVERAGE GROWTH RATES IN DPS, EPS, AND BPS FOR**
8 **CENTRAL REGION ELECTRIC UTILITIES FOR THE YEARS 1968 TO 1999**
9 **TO ESTIMATE INVESTORS' EXPECTATIONS OF LONG RUN GROWTH**
10 **IN THE DCF MODEL?**

11 A. No. As discussed above and in my direct and rebuttal testimonies, the DCF
12 model requires the growth forecasts of investors, and my studies indicate that
13 investors use the analysts' EPS growth forecasts to forecast long-run future
14 growth in the DCF model. In addition, historical growth rates are strongly
15 influenced by accounting adjustments and one-time write-offs that do not
16 relate to a company's expected future growth.

17 **Q. DOES STAFF PROVIDE ANY EVIDENCE THAT INVESTORS SHARE ITS**
18 **VIEW OF THE LONG RUN SUSTAINABLE GROWTH FOR ELECTRIC**
19 **UTILITIES?**

20 A. No. Staff simply states its own opinion regarding long-run utility growth and
21 ignores the evidence that utility stock prices are highly correlated with
22 analysts' EPS growth rates.

1 **Q. DOES THE DCF MODEL REQUIRE THE GROWTH EXPECTATIONS OF**
2 **INVESTORS OR STAFF'S ESTIMATE OF LONG RUN SUSTAINABLE**
3 **GROWTH?**
4 A. The DCF model requires the growth expectations of investors rather than
5 Staff's estimate of long run sustainable growth. Since investors' growth rates
6 determine stock prices, if Staff believes it should use a sustainable growth
7 rate that is less than investors' growth expectations, for consistency, Staff
8 should also reduce the stock price in its DCF model.
9 **Q. DO YOU HAVE EVIDENCE THAT INVESTORS USE THE ANALYSTS'**
10 **GROWTH FORECASTS IN MAKING STOCK BUY AND SELL DECISIONS?**
11 A. Yes. I report such evidence in my direct testimony at pages 31 - 33.
12 **Q. WHAT CONCLUSIONS DO YOU DRAW FROM THE EVIDENCE THAT**
13 **INVESTORS USE THE ANALYSTS' GROWTH FORECASTS IN MAKING**
14 **STOCK BUY AND SELL DECISIONS?**
15 A. I conclude that the analysts' growth forecasts used in my DCF analyses are
16 reasonable estimates of investors' long run growth expectations. In
17 consequence, the Commission should rely on my DCF results rather than
18 Staff's DCF results in estimating Empire's cost of equity.

19 **IV. <u>FORECASTED INTEREST RATES</u>**
20 **Q. YOUR RISK PREMIUM APPROACHES REQUIRE AN ESTIMATE OF THE**
21 **YIELD TO MATURITY ON A-RATED UTILITY BONDS, AND YOUR CAPM**
22 **APPROACHES REQUIRE AN ESTIMATE OF THE YIELD TO MATURITY**
23 **ON LONG-TERM TREASURY BONDS. HOW DO YOU ESTIMATE THESE**
24 **YIELDS TO MATURITY IN THIS PROCEEDING?**

1 A. I estimate these yields to maturity using forecasted interest rates on A-rated
2 utility bonds and long-term Treasury bonds.

3 **Q. WHY DO YOU USE FORECASTED INTEREST RATES RATHER THAN**
4 **CURRENT INTEREST RATES IN YOUR RISK PREMIUM ANALYSES?**

5 A. I use forecasted interest rates because the fair rate of return standard
6 requires that Empire have an opportunity to earn its cost of equity during the
7 period when rates are in effect, and the rates approved in this case will not
8 come into effect until a time in 2013 and will likely continue in effect in 2014.

9 **Q. WHY ARE ECONOMISTS FORECASTING THAT INTEREST RATES WILL**
10 **INCREASE OVER THE NEXT SEVERAL YEARS?**

11 A. Economists are forecasting that interest rates will increase because they
12 recognize that current interest rates are being artificially lowered by the
13 Federal Reserve's policy ("Operation Twist") to keep long-term interest rates
14 low in order to stimulate the economy. Once the economy begins to recover,
15 economists recognize that the Federal Reserve will need to allow interest
16 rates to increase in order to prevent inflation.

17 **Q. DOES STAFF AGREE WITH YOUR USE OF FORECASTED INTEREST**
18 **RATES TO ESTIMATE THE INTEREST RATE COMPONENT OF YOUR**
19 **RISK PREMIUM AND CAPM METHODS?**

20 A. No. Staff claims that my use of forecasted interest rates in this proceeding:
21 (1) is unnecessary because current bond yields already reflect investors'
22 expectations of future interest rates; and (2) is inconsistent with my use of
23 current stock prices in my DCF approach (Staff Rebuttal at 7).

1 **Q. DO CURRENT BOND YIELDS ALREADY "REFLECT INVESTORS' EXPECTATIONS CONCERNING FUTURE INTEREST RATES"?**

3 A. I am uncertain what Staff means by the word "reflect" in the context of its statement (see Staff Rebuttal at 7). However, if Staff is using the word "reflect" to mean that the current yield on a twenty-year bond is the best forecast of the yield on twenty-year bonds issued one year from now, then Staff's statement is undoubtedly incorrect. For example, if an investor purchases a twenty-year bond on January 1, 2013, the yield on the bond must be approximately equal to the expected yield on a sequence of one-year bonds purchased on January 1 of each year from 2013 to 2033. However, if the investor purchases a twenty-year bond on January 1, 2014, the yield on that bond must be approximately equal to the expected yield on a sequence of one-year bonds purchased on January 1 of each year from 2014 to 2034. Because the two bonds do not cover the same time periods, the yield on the twenty-year bond purchased in 2013 is not the best forecast of the yield on the twenty-year bond purchased in 2014.

17 **Q. IS THE USE OF FORECASTED INTEREST RATES IN YOUR RISK PREMIUM STUDIES INCONSISTENT WITH YOUR USE OF CURRENT STOCK PRICES IN YOUR DCF APPROACH?**

20 A. No. Although one could, in principle, forecast the DCF cost of equity, such a forecast would require not only a forecast of future stock prices, but also a forecast of future dividends and future growth rates as of a future point in time. I do not know of any source for obtaining such data. In contrast, sources

1 such as Blue Chip, Bloomberg, and Value Line are available to obtain
2 forecasted interest rate data.

3 **Q. STAFF RECALCULATES COST OF EQUITY ESTIMATES FROM YOUR**
4 **RISK PREMIUM AND CAPM USING CURRENT INTEREST RATES**
5 **RATHER THAN FORECASTED INTEREST RATES. ARE STAFF'S**
6 **RECALCULATED ESTIMATES REASONABLE ESTIMATES OF EMPIRE'S**
7 **COST OF EQUITY?**

8 A. No. As discussed above, I believe that forecasted interest rates should be
9 used in risk premium and CAPM methods at this time because current
10 interest rates are being artificially depressed by the Federal Reserve's
11 injections of massive amounts of liquidity into financial markets; and
12 economists are projecting higher interest rates once the economy begins to
13 improve. Because electric utilities make investments in long-lived assets, the
14 use of artificially low interest rates in cost of equity models distort investment
15 decisions

16 **Q. DID YOU GIVE ANY WEIGHT TO YOUR CAPM COST OF EQUITY**
17 **ESTIMATES IN THIS PROCEEDING?**

18 A. No. I gave no weight to my CAPM results in this proceeding because, for the
19 reasons discussed in my direct testimony, the CAPM underestimates the cost
20 of equity for companies such as utilities with betas less than 1.0. For
21 example, according to the CAPM, investors in utility stocks should expect to
22 earn a risk premium over the yield on long-term Treasury securities equal to
23 the average utility beta times the expected risk premium on the S&P 500.
24 Thus, the ratio of the risk premium on the utility portfolio to the risk premium

1 on the S&P 500 should equal the utility beta. However, the average utility
2 beta at the time of my studies is approximately 0.70, whereas the historical
3 ratio of the utility risk premium to the S&P 500 risk premium is 0.92
4 (5.21 ÷ 5.67 = 0.92). In short, an application of the historical CAPM at this
5 time significantly underestimates the cost of equity for utility companies with
6 an average beta less than 1.0.

7 **Q. STAFF CRITICIZES YOU FOR NOT INCLUDING YOUR CAPM RESULTS**
8 **IN YOUR COST OF EQUITY RECOMMENDATION. DOES STAFF USE ITS**
9 **CAPM RESULTS IN ITS COST OF EQUITY RECOMMENDATION?**

10 A. No. Staff obtains CAPM cost of equity results in the range 5.64 percent to
11 6.73 percent, results that are more than 300 basis points lower than Staff's
12 9.5 percent recommended ROE. Thus, Staff implicitly rejects the results of its
13 own CAPM analysis.

14 **V. <u>TESTS OF REASONABLENESS</u>**

15 **Q. DOES STAFF COMMENT ON THE REASONABLENESS OF YOUR**
16 **RECOMMENDED 10.6 PERCENT ROE IN THIS PROCEEDING?**

17 A. Yes. Staff claims that it is unreasonable for me to recommend the same cost
18 of equity in this proceeding as I had recommended in Case No. ER-2011-
19 0004 because, in their opinion, the cost of equity has declined since Empire's
20 last rate case.

21 **Q. HAVE YOU PRESENTED COST OF EQUITY EVIDENCE IN THIS**
22 **PROCEEDING THAT SUPPORTS YOUR RECOMMENDED 10.6 PERCENT**
23 **ROE?**

1 A. Yes. My cost of equity evidence is described in my direct testimony. Based on
2 DCF, ex ante, and ex post risk premium analyses, I obtained cost of equity
3 model results equal to 10.2 percent, 10.9 percent, and 10.6 percent,
4 respectively, with an average result of 10.6 percent.

5 **Q. HOW DOES YOUR RECOMMENDED 10.6 PERCENT ROE COMPARE TO**
6 **THE AVERAGE AUTHORIZED ROE FOR INTEGRATED ELECTRIC**
7 **UTILITIES IN 2012?**

8 A. As shown in my rebuttal testimony, the average allowed ROE for integrated
9 electric utilities in 2012 is 10.3 percent. Recognizing that Empire is more risky
10 than the average integrated electric utility, I believe that my 10.6 percent ROE
11 recommendation for Empire is conservative. However, I did not add a risk
12 premium to my cost of equity model results to account for the additional risk
13 of Empire.

14 **Q. AS NOTED ABOVE, STAFF CLAIMS THAT YOUR RECOMMENDATION IS**
15 **UNREASONABLE BECAUSE YOUR COST OF EQUITY**
16 **RECOMMENDATION IN THIS PROCEEDING IS THE SAME AS IT WAS IN**
17 **CASE NO. ER-2011-0004, EVEN THOUGH, IN STAFF'S OPINION, THE**
18 **COST OF EQUITY HAS DECLINED. IS STAFF'S RECOMMENDED ROE IN**
19 **THIS PROCEEDING LOWER THAN ITS RECOMMENDED ROE IN CASE**
20 **NO. ER-2011-0004?**

21 A. No. In Case No. ER-2011-0004, Staff recommended an ROE equal to
22 9.1 percent, whereas its recommended ROE in this proceeding is 9.5 percent.

23 **Q. AS YOU NOTE ABOVE, YOUR RECOMMENDED 10.6 PERCENT ROE**
24 **FOLLOWS DIRECTLY FROM YOUR COST OF EQUITY MODEL RESULTS.**

1 **DOES STAFF'S RECOMMENDED ROE FOLLOW DIRECTLY FROM**
2 **STAFF'S COST OF EQUITY MODEL RESULTS?**
3 A. No. Staff's recommended 9.5 percent ROE does not appear to be based on
4 its cost of equity results, as Staff's recommended ROE exceeds all of its cost
5 of equity model results (see in TABLE 1 below).

TABLE 1
STAFF COST OF EQUITY MODEL RESULTS ER-2012-0345

MODEL	RANGE OF RESULTS		PAGE	SCHEDULE
Single-stage DCF	8.40%	9.40%	Page 32	12-2
Multi-Stage DCF	7.62%	8.38%	Page 33	14-5, 14-6, 14-7
CAPM	5.64%	6.73%	Page 47	23-2

6 **Q. WHY DOES STAFF RECOMMEND A 9.5 PERCENT ROE WHEN THE**
7 **STAFF'S COST OF EQUITY MODEL RESULTS ARE ALL LESS THAN**
8 **9.5 PERCENT?**
9 A. Staff explains that it recommends a 9.5 percent ROE because the
10 Commission has expressed concerns that Staff's cost of equity model results
11 are too low:

12 Staff recommends that the Commission authorize a ROE of 9.50%
13 based on the high-end of its recommended ROE range due to past
14 concerns about Staff's estimates being too low. [Staff Cost of
15 Service Report at 16]

16 **Q. IS THERE A WAY FOR THE COMMISSION TO ASSESS WHETHER YOUR**
17 **RECOMMENDED 10.6 PERCENT ROE IS MORE REASONABLE THAN**
18 **STAFF'S RECOMMENDED 9.5 PERCENT ROE?**
19 A. Yes. As discussed in my direct and rebuttal testimonies, the Commission has
20 previously cited authorized returns for other electric utilities as being an

1 indicator of appropriate returns for Missouri utilities. As shown in my rebuttal
2 testimony, the average allowed ROE for integrated electric utilities in 2012 is
3 10.3 percent. However.the Commission should also recognize that Empire is
4 more risky than the average integrated electric utility and that a risk premium
5 above the average allowed ROE for integrated electric utilities is appropriate.
6 If the Commission were to adopt a fifty-basis-point risk premium for Empire's
7 greater risk, for example, my recommended 10.6 percent cost of equity could
8 be judged to be reasonable on the grounds that it is twenty basis points less
9 than the 10.8 percent ROE indicated by adding a fifty-basis-point risk
10 premium to the average 10.3 percent allowed ROE for integrated electric
11 utilities in 2012. On the basis of these criteria, I believe the Commission can
12 find my recommended ROE to be reasonable.

13 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

14 A. Yes, it does.

AFFIDAVIT OF JAMES H. VANDER WEIDE

STATE OF NORTH CAROLINA)
) ss
COUNTY OF DURHAM)

On the 28th day of January, 2013, before me appeared James H. Vander Weide, to me personally known, who, being by me first duly sworn, states that he is Research Professor of Finance and Economics at the Fuqua School of Business of Duke University and also 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 28th day of January, 2013.

Sandra W. Bumpass

Notary Public

My commission expires: 05-11-2013

SANDRA W. BUMPASS
NOTARY
PUBLIC
DURHAM COUNTY, NC