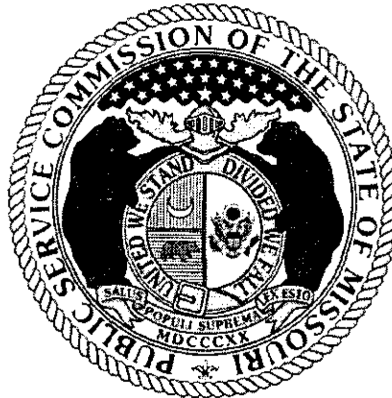
KCPL 802

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI



In the Matter of The Empire District Electric Company's Tariffs to Increase Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	))))	**Case No. ER-2008-0093** Tariff No. YE-2008-0205

REPORT AND ORDER

Issue Date: July 30, 2008

Effective Date: August 9, 2008

Empire ~~KCPL~~ Exhibit No. KCPL 802
Date 2/14/11 Reporter LMB
File No. ER-2010-0355

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company's Tariffs to Increase Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	))))	**Case No. ER-2008-0093** Tariff No. YE-2008-0205

APPEARANCES

James C. Swearengen, **L. Russell Mitten**, **Paul A. Boudreau**, **Dean L. Cooper**, and **Diana C. Carter**, Brydon, Swearengen & England P.C. 312 East Capitol Avenue, P.O. Box 456, Jefferson City, Missouri 65102

For The Empire District Electric Company.

Kevin Thompson, General Counsel, **Steven Dotthiem**, **Steven Reed**, **Jennifer Heintz**, and **Sarah Kliethermes**, P.O. Box 360, Jefferson City, Missouri 65102

For the Staff of the Missouri Public Service Commission.

Lewis Mills, Public Counsel, P.O. Box 2230, Jefferson City, Missouri 65102

For the Office of the Public Counsel and the Public.

Shelley Ann Woods, Assistant Attorney General, P.O. Box 899, Jefferson City, Missouri 65102

For the Missouri Department of Natural Resources.

Stuart W. Conrad, and **David L. Woodsmall**, FINNEGAN, CONRAD & PETERSON, L.C., 3100 Broadway, Suite 1209, Kansas City, Missouri 64111

For the Industrial Intervenors.

DEPUTY CHIEF REGULATORY LAW JUDGE: **Morris L. Woodruff**

REPORT AND ORDER

Table of Contents

Appearances 1

Procedural History 4

The Partial Stipulations and Agreements 5

Overview 5

Conclusions of Law Regarding Jurisdiction 7

Conclusions of Law Regarding the Determination of Just and Reasonable Rates 7

The Rate Making Process 9

The Issues 10

1. Return on Equity 10

   Findings of Fact 12

      Proposed Reduction for Fuel Adjustment Clause 23

   Conclusions of Law 25

   Decision 26

2. The Proposed Fuel Adjustment Clause 27

   Empire's Ability to Request a Fuel Adjustment Clause and Motion to Reject Specified Tariff Sheets and Strike Testimony 27

   General Findings of Fact Regarding Fuel Adjustment Clause 33

   General Conclusions of Law Regarding Fuel Adjustment Clause 35

   Is a Fuel Adjustment Clause Appropriate? 37

   Appropriate Incentive Mechanism 40

   Other Details About the Fuel Adjustment Clause 47

      Unit Train and Fuel Handling Costs 47

Natural Gas Pipeline Demand Charges 49

Emission Allowance Costs 49

Heat Rate Testing of Generation Plants.. 51

Rate Design of the Fuel Adjustment Clause.. 52

3. Off-System Sales Margin 53

4. Depreciation 57

5. Inclusion of Asbury SCR in Rate Base 61

6. Other Issues Related to the Inclusion of Asbury SCR in Rate Base................ 63

7. Tracker for Cost of Compliance with Commission Rules on Vegetation Management and Infrastructure Inspections 64

Ordered Paragraphs... 73

The Missouri Public Service Commission, having considered all the competent and substantial evidence upon the whole record, makes the following findings of fact and conclusions of law. The positions and arguments of all of the parties have been considered by the Commission in making this decision. Failure to specifically address a piece of evidence, position, or argument of any party does not indicate that the Commission has failed to consider relevant evidence, but indicates rather that the omitted material was not dispositive of this decision.

Summary

This order allows Empire to increase the revenue it may collect from its Missouri customers by approximately $22,040,395. As a result, the average residential customer's monthly bill will increase by 6.7%, or approximately $6.13 per month.

Procedural History

On October 1, 2007, The Empire District Electric Company filed tariff sheets designed to implement a general rate increase for electric service in its Missouri service area. The tariff would have increased Empire's annual electric revenues by approximately $34,725,203. The tariff revisions carried an effective date of October 31, 2007.

On October 3, by order, the Commission suspended Empire's tariff until August 28, 2008, the maximum amount of time allowed by the controlling statute.[1] In the same order, the Commission directed that notice of Empire's tariff filing be provided to interested parties and the public. The Commission also established October 23 as the deadline for submission of applications to intervene. Subsequently, the Missouri Department of Natural Resources and the Industrial Intervenors[2] were allowed to intervene.

On November 16, the Commission established the test year for this case as the 12-month period ending June 30, 2007, with an up-date period ending December 31, 2007. Subsequently, the Commission established a further true-up period through February 29, 2008. In its November 16 order, the Commission established a procedural schedule leading to a hearing beginning on May 12, 2008.

The Commission conducted local public hearings in Joplin and Reeds Spring, Missouri, at which the Commission heard comments from Empire's customers and the public regarding Empire's request for a rate increase. The parties prefiled direct, rebuttal, and surrebuttal testimony. The evidentiary hearing began on May 12, and continued on May 14, 15, 16, and 19. Further true-up direct testimony was prefiled on June 10, with

---

[1] Section 393.150, RSMo 2000.

[2] Initially, the companies comprising the Industrial Intervenors were Praxair, Inc. and Explorer Pipeline Company. Subsequently, General Mills, Inc., which was originally granted party status on its own, aligned itself with the Industrial Intervenors and ceased to participate as a separate party.

true-up rebuttal following on June 16. A true-up hearing was convened on June 19, but the parties announced that they did not wish to cross-examine any of the witnesses that offered true-up testimony. The true-up hearing was adjourned after the prefiled true-up testimony was admitted into evidence. The parties filed initial post-hearing briefs on June 18, with reply briefs following on July 3.

The Partial Stipulations and Agreements

During the course of the evidentiary hearing, various parties filed three nonunanimous partial stipulations and agreements resolving several issues that would otherwise have been the subject of testimony at the hearing. No party opposed the partial stipulations and agreements. As permitted by its regulations, the Commission treated these unopposed partial stipulations and agreements as unanimous.[3] After considering each of the stipulations and agreements, the Commission approved them as a resolution of the issues addressed in those agreements.[4] The issues that were resolved in those stipulations and agreements will not be further addressed in this report and order.

Overview

Empire is an investor-owned utility providing retail electric service to portions of southwest Missouri, as well as the adjacent corners of Kansas, Oklahoma, and Arkansas. As of June 30, 2007, Empire provided electric service to approximately 166,000 customers, of whom, approximately 147,000 live in Missouri. Empire also provides regulated water service to approximately 4,500 customers in Aurora, Marionville, and Verona, Missouri. Through its wholly owned subsidiary, The Empire District Gas Company, Empire provides

---

[3] Commission Rule 4 CSR 240-2.115(C).

[4] The Commission issued an *Order Approving Stipulation and Agreement as to Certain Issues* on April 23, 2008, and an *Order Approving Second and Third Stipulation and Agreements as to Certain Issues* on May 20, 2008.

natural gas service to approximately 47,000 gas customers in northwest, north central, and west central Missouri.[5] The rates Empire charges for water and natural gas are not at issue in this case.

Empire began the rate case process when it filed its tariff on October 1, 2007. In doing so, Empire asserted it was entitled to increase its rates enough to increase its Missouri retail rates by $34.7 million per year, an increase of approximately 10.1 percent. Empire set out its rationale for increasing its rates in the direct testimony it filed along with its tariff on October 1. In addition to its filed testimony, Empire provided work papers and other detailed information and records to the Staff of the Commission, Public Counsel, and to the intervening parties. Those parties then had the opportunity to review Empire's testimony and records to determine whether the requested rate increase was justified.

Obviously, there are a multitude of matters about which the parties could disagree. Fortunately, there was no disagreement about many matters and, as a result, those potential issues were never brought before the Commission. Where the parties disagreed, they prefiled written testimony for the purpose of raising those issues to the attention of the Commission. All parties were given an opportunity to prefile three rounds of testimony – direct, rebuttal, and surrebuttal. The process of filing testimony and responding to the testimony filed by other parties revealed areas of agreement that resolved some issues and areas of disagreement that revealed new issues. On May 5, the parties filed a Joint Statement of Issues listing the issues they asked the Commission to resolve.

[5] Gipson Direct, Ex. 1, Page 3, Lines 9-17.

As previously indicated, a number of the identified issues were resolved by the approved partial stipulations and agreements and will not be further addressed in this report and order. The remaining issues will be addressed in turn.

Conclusions of Law Regarding Jurisdiction

Empire is a public utility, and an electrical corporation, as those terms are defined in Section 386.020(42) and (15), RSMo (Supp. 2007). As such, Empire is subject to the Commission's jurisdiction pursuant to Chapters 386 and 393, RSMo.

Section 393.140(11), RSMo 2000, gives the Commission authority to regulate the rates Empire may charge its customers for electricity. When Empire filed a tariff designed to increase its rates, the Commission exercised its authority under Section 393.150, RSMo 2000, to suspend the effective date of that tariff for 120 days beyond the effective date of the tariff, plus an additional six months.

Conclusions of Law Regarding the Determination of Just and Reasonable Rates

In determining the rates Empire may charge its customers, the Commission is required to determine that the proposed rates are just and reasonable.[6] Empire has the burden of proving its proposed rates are just and reasonable.[7]

In determining whether the rates proposed by Empire are just and reasonable, the Commission must balance the interests of the investor and the consumer.[8] In discussing the need for a regulatory body to institute just and reasonable rates, the United States Supreme Court has held as follows:

---

[6] Section 393.150.2, RSMo 2000.

[7] *Id.*

[8] *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603, (1944).

> Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the services are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment.[9]

In the same case, the Supreme Court provided the following guidance on what is a just and reasonable rate:

> What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.[10]

The Supreme Court has further indicated:

> '[R]egulation does not insure that the business shall produce net revenues.' But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.[11]

---

[9] *Bluefield Water Works & Improvement Co. v. Public Service Commission of the State of West Virginia*, 262 U.S. 679, 690 (1923).

[10] *Id.* at 692-93.

[11] *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944) (citations omitted).

In undertaking the balancing required by the Constitution, the Commission is not bound to apply any particular formula or combination of formulas. Instead, the Supreme Court has said:

> Agencies to whom this legislative power has been delegated are free, within the ambit of their statutory authority, to make the pragmatic adjustments which may be called for by particular circumstances.[12]

Furthermore, in quoting the United States Supreme Court in *Hope Natural Gas*, the Missouri Court of Appeals said:

> [T]he Commission [is] not bound to the use of any single formula or combination of formulae in determining rates. Its rate-making function, moreover, involves the making of 'pragmatic adjustments.' ... Under the statutory standard of 'just and reasonable' it is the result reached, not the method employed which is controlling. It is not theory but the impact of the rate order which counts.[13]

The Rate Making Process

The rates Empire will be allowed to charge its customers are based on a determination of the company's revenue requirement. Empire's revenue requirement is calculated by adding the company's operating expenses, its depreciation on plant in rate base, taxes, and its rate of return multiplied by its rate base. The revenue requirement can be expressed as the following formula:

Revenue Requirement = E + D + T + R(V-AD+A)
Where: E = Operating expense requirement
D = Depreciation on plant in rate base
T = Taxes including income tax related to return
R = Return requirement
(V-AD+A) = Rate base
For the rate base calculation:
V = Gross Plant
AD = Accumulated depreciation

---

[12] *Federal Power Commission v. Natural Gas Pipeline Co.* 315 U.S. 575, 586 (1942).

[13] *State ex rel. Associated Natural Gas Co. v. Pub. Serv. Comm'n*, 706 S.W. 2d 870, 873 (Mo. App. W.D. 1985).

A = Other rate base items

All parties accept the basic formula. Disagreements arise over the amounts that should be included in the formula.

The Issues

1. Return on Equity

Discussion:

This issue concerns the rate of return Empire will be authorized to earn on its rate base. Rate base includes things like generating plants, electric meters, wires and poles, and the trucks driven by Empire's repair crews. In order to determine a rate of return, the Commission must determine Empire's cost of obtaining the capital it needs. The relative mixture of sources Empire uses to obtain the capital it needs is its capital structure. Empire's actual capital structure as of February 29, 2008 is:

Common Equity	50.78%
Trust Preferred Stock	4.58%
Long-Term Debt	44.65%[14]

The composition of Empire's capital structure is not an issue in this case.

The cost of long-term debt and preferred stock is determined simply by reviewing the interest rates specified in the debt or stock instruments issued by Empire. Those costs are not challenged by any party and are not an issue. The only issue regarding rate of return that the Commission must decide is Empire's cost of obtaining common equity. To do that the Commission must determine the appropriate rate of return on equity Empire should be allowed to earn.

[14] Oligschlaeger True-Up Direct, Ex. 233, Page 3, Lines 5-7.

Determining an appropriate return on equity is without a doubt the most difficult part of determining a rate of return. The cost of long-term debt and the cost of preferred stock are relatively easy to determine because their rate of return is specified within the instruments that create them. In contrast, in determining a return on equity, the Commission must consider the expectations and requirements of investors when they choose to invest their money in Empire rather than in some other investment opportunity. As a result, the Commission cannot simply find a rate of return on equity that is unassailably scientifically, mathematically, or legally correct. Such a "correct" rate does not exist. Instead, the Commission must use its judgment to establish a rate of return on equity attractive enough to investors to allow the utility to fairly compete for the investors' dollar in the capital market, without permitting an excessive rate of return on equity that would drive up rates for Empire's ratepayers. In order to obtain guidance about the appropriate rate of return on equity, the Commission considers the testimony of expert witnesses.

Three financial analysts offered recommendations regarding an appropriate return on equity in this case. James H. Vander Weide testified on behalf of Empire. Vander Weide is Research Professor of Finance and Economics at Duke University, the Fuqua School of Business. He holds a Ph.D. in Finance from Northwestern University.[15] He recommends the Commission allow Empire a return on equity of 11.6 percent.[16]

Matthew J. Barnes testified on behalf of Staff. Barnes is employed by the Commission as a Utility Regulatory Auditor III. He has earned a Masters in Business

---

[15] Vander Weide Direct, Ex. 28, Page 1, Lines 3-10.

[16] Vander Weide Direct, Ex. 28, Page 4, Lines 10-11.

Administration with an emphasis in Accounting from William Woods University.[17] Barnes recommends the Commission allow Empire a return on equity in the range of 9.72 percent to 10.80 percent, with a mid-point of 10.26 percent.[18]

Michael Gorman testified on behalf of the Industrial Intervenors. Gorman is a consultant from St. Louis, Missouri, who holds a Masters in Business Administration with a concentration in Finance from the University of Illinois at Springfield.[19] He recommends the Commission allow Empire a return on equity in the range of 9.5 percent to 10.3 percent, with a recommended return of 10.0 percent.[20]

Findings of Fact:

Cost of Capital can be defined as the return investors expect to receive on alternative investments of comparable risk.[21] Remember that the United States Supreme Court in the *Bluefield* case said a public utility is entitled to rates that will permit it to earn a return equal to the return being earned on investments in businesses with corresponding risks and uncertainties.[22] Therefore, it is appropriate for the Commission to look to the earnings of comparable utilities to determine an appropriate rate of return for Empire.

Financial analysts use three generally accepted methods to estimate a company's fair rate of return on equity. The Discounted Cash Flow (DCF) method assumes the current market price of a firm's stock is equal to the discounted value of all expected future cash

---

[17] Staff Report - Cost of Service, Ex. 204, Appendix I, Page 1.

[18] Barnes Surrebuttal, Ex. 219, Page 2, Lines 14-18.

[19] Gorman Direct, Ex. 501, Appendix A, Page 1.

[20] Gorman Direct, Ex. 501, Page 2, Lines 12-14.

[21] Vander Weide Direct, Ex. 28, Page 5, Lines 11-12.

[22] *Bluefield Water Works & Improvement Co. v. Public Service Commission of the State of West Virginia*, 262 U.S. 679, 690 (1923).

flows. The Risk Premium method assumes that all the investor's required return on an equity investment is equal to the interest rate on a long-term bond plus an additional equity risk premium to compensate the investor for the risks of investing in equities compared to bonds. The Capital Asset Pricing Method (CAPM) assumes the investor's required rate of return on equity is equal to a risk-free rate of interest plus the product of a company-specific risk factor, beta, and the expected risk premium on the market portfolio. No one method is any more "correct" than any other method in all circumstances. Analysts balance their use of all three methods to reach a recommended return on equity.

Before discussing the expert opinions offered in this case, the Commission would like to explain what it means by "credibility" in the context of expert opinions regarding an appropriate return on equity. All of the witnesses offered as experts are indeed experts in their field. It is to be expected that experts will reach different conclusions regarding analyses that are based in large measure on professional opinion. When the Commission says in this, or prior decisions, that a particular witness is not credible, it does not mean the Commission believes that witness is untruthful. Conversely, a finding that a return on equity witness in a particular case is credible does not mean the Commission finds him or her to be particularly virtuous. In neither situation should that witness' testimony be given greater or lesser weight in a subsequent case.

Several parties point out in their briefs that in recent rate case decisions for other companies, the Commission has described Mr. Gorman as credible and Dr. Vander Weide as not credible. Those descriptions in other cases have no bearing on the Commission's decision in this case. The Commission will evaluate each witness' testimony on its merits, without regard to any testimony that witness presented to the Commission in other cases.

In evaluating the expert testimony, the Commission is also aware that the witnesses for the company and for the Industrial Intervenors are hired to testify for a reason. Empire, which will benefit from a high return on equity, expects its expert witness to present a relatively high recommendation. Empire's witness, Dr. Vander Weide recommends a return on 11.6 percent. The Industrial Intervenors, who will pay higher electric rates to support a higher return on equity, expect their expert to present a relatively low recommendation. The Industrial Intervors witness, Mr. Gorman, recommends a return of 10.0 percent. It is likely the appropriate return on equity is somewhere between those two extremes.

Dr. Vander Weide, the expert witness offered by Empire, recommends the Commission authorize a return on equity of 11.6 percent. However, Vander Weide's overall recommendation is based on the results of three methods of analysis, one of which yielded a result sharply different from the other two.

Vander Weide's evaluation using a quarterly DCF method resulted in an estimated cost of equity of 11.3 percent.[23] Using an Ex Ante Risk Premium method, Vander Weide reached an estimated cost of equity 10.97 percent[24] and using an Ex Post Risk Premium method he reached an estimated cost of equity ranging between 10.70 percent and 11.35 percent with a midpoint of 11.02 percent.[25] The average result of his two Risk Premium analyses is 11.0 percent.[26] Vander Weide also used two versions of the third method, the CAPM. His Historical CAPM analysis showed an estimated cost of equity of 11.9 percent, while his DCF-Based CAPM applied to the S&P 500 yielded an estimated cost of equity at

---

[23] Vander Weide Direct, Ex. 28, Page 26, Lines 1-2.

[24] Vander Weide Direct, Ex. 28, Page 29, Lines 6-9.

[25] Vander Weide Direct, Ex. 28, Page 36, Lines 1-2.

[26] Vander Weide Direct, Ex. 28, Page 36, Lines 3-5.

a whopping 13.0 percent. The average cost of equity from his two CAPM studies was thus 12.5 percent.[27] Vander Weide then averaged the results of his three methods to arrive at his overall recommendation of 11.6 percent.

However, that overall recommendation is simply an average of the results of the three methods and that average is driven up by the CAPM result, especially the DCF-Based CAPM result of 13.0 percent. If the remarkably high CAPM result is thrown out as clearly unreasonable, the average of the other two methods as used by Vander Weide is 11.15 percent.

A return of 11.15 percent is still inflated. For example Vander Weide's DCF estimate of 11.3 percent was based on a market weighted average growth rate.[28] Vander Weide claims to use a market-weight calculation to indicate the relative share of each company in the typical investor's portfolio of companies.[29] That gives inordinately high weight to certain company DCF estimates based on their market value. As Gorman explains, using a simple average DCF return on Vander Weide's proxy group yields a DCF estimate of 10.7 percent.

Similarly, Vander Weide's 11 percent estimate resulting from his risk premium analysis is inflated. As Gorman explains, Vander Weide's calculation uses an average annual DCF return estimate of 11.07 percent for 2006 and 11.06% for 2007. Those returns are higher than the returns on equity authorized by regulatory commissions for integrated electric utility companies during those years, which were 10.60 percent and 10.70 percent respectively.[30] Vander Weide's use of those high return estimates results in a very high

---

[27] Vander Weide Direct, Ex. 28, Page 38, Lines 17-24.

[28] Gorman Rebuttal, Ex. 504, Page 5, lines 1-4.

[29] Vander Weide Surrebuttal, Page 15, Lines 16-19.

[30] Gorman Rebuttal, Ex. 504, Page 9, Lines 1-8.

risk premium estimate of 5 percent for those two years. Using more reasonable DCF return estimates that are in line with those allowed by the various state commissions, Gorman recalculated Vander Weide's ex ante risk premium analysis to yield a return of 10.32 percent.[31]

Commissions have recently allowed average returns on equity to integrated electric utilities, excluding wires-only utilities, at 10.6 to 10.7 percent instead of the 10.32 percent average for all electric utilities.[32] Therefore, an ex ante risk-premium analysis using those higher averages would yield a return .2 to .4 percent higher than the 10.32 percent suggested by Gorman, resulting in a return on equity in the 10.5 to 10.7 range, and the record establishes that Empire is, in fact, a riskier investment than most of its utility peers.

Finally, Dr. Vander Weide employed a third means to calculate an appropriate return on equity for Empire. The capital asset pricing model (CAPM) is used to calculate the expected or required return of a given security by adding the risk-free rate of interest with the company's equity "beta" multiplied by a market risk premium.[33]

In preparing his CAPM analysis, Dr. Vander Weide adopted the July 2007 average yield to maturity on 20-year Treasury bonds of 5.19% as his estimate of a risk-free rate.[34] This approach for estimating the risk-free rate was criticized by both Gorman and Barnes as being too high. The commission agrees with their criticism and notes the yield on 30-year Treasury bonds is the best measure of the risk-free rate for use in CAPM and risk

---

[31] Gorman Rebuttal, Ex. 504, Page 9, Lines 8-22.

[32] Vander Weide Surrebuttal, Ex. 30, Page 10, Lines 15-22.

[33] Vander Weide Direct, Page36, Lines 8-11.

[34] Vander Weide Direct, Page 36, Lines 22-23.

premium analysis because common stock is generally viewed as a long-term investment where the dividends last indefinitely.[35]

The best evidence in the record for establishing a risk-free premium in this case is found in Schedule MPG-10 of Mr. Gorman's direct testimony, where he notes the average 30-year Treasury Bond Yield was 4.91% for all of 2006 and 4.89% for the first six months of 2007.[36] Accordingly, this Commission will adopt the average of those two numbers – 4.90%- as the risk-free premium to be used for our CAPM analysis in this case.

Similarly, Dr. Vander Weide's 0.94 Value Line beta for his proxy group of electric companies[37] seems rather high in comparison to those offered by Gorman and Barnes. Gorman, on the other hand, produced a series of comparable group average Betas for the most recent five-year period. Gorman's comparable group average of .88 for 2007 is one hundredth of a point different from the average of his and Vander Weide's Beta estimates. Accordingly, this number appears most reasonable under the present circumstances.

The final variable necessary in the CAPM analysis is the "market risk premium." Vander Weide's recommended 7.1%. Gorman recommended a range of 6.5% to 7.0%. The evidence in this case indicated Gorman tended to round to the lowest number whenever convenient. In lieu of accepting all of Gorman's adjustments to lower the risk premium in this matter, the Commission will simply pick the midpoint between those two numbers yielding a result of 6.75%. Thus, multiplying the most appropriate Beta in this case (.88) by the average market risk premium of 6.75% produces a number (5.94%) that can be added to the risk-free premium of 4.90% to achieve a CAPM estimate of 10.84%.

---

[35] Roger Morin, New Regulatory Finance, 151 (Public Utility Reports, Inc. 2006).

[36] Gorman Direct, Ex. 501, Schedule MPG-10.

[37] Vander Weide Direct, Ex. 28, Page 37, Lines 1-2.

This number tracks with the high end of Gorman's adjusted CAPM analysis of 10.8% contained in his surrebuttal testimony.[38]

An examination of Gorman's testimony indicates he tends to underestimate an appropriate return on equity for Empire. Gorman utilized a constant growth DCF model that resulted in an estimated return on equity of 11.54 percent.[39] For that model, he used an average of three analyst growth rate projections prepared by Zacks, Reuters, and SNL Financial.[40] The average three to five year growth rate for his analysts is 7.40 percent.[41] Gorman, however, believes his analyst growth rate projections are unreasonable. For that reason, he concludes his constant growth DCF model is unreasonable and does not give it any weight in recommending a return on equity for Empire.[42]

Instead, Gorman relies on a two-stage DCF model that yielded a recommended return on equity of 9.46 percent.[43] That would be lower than the lowest return on equity allowed to an electric utility by any commission in 2007.[44] For purposes of this two-stage DCF model, Gorman assumes that investors believe his proxy companies will grow at the average analyst growth rates for five years, and then beginning in the sixth year grow at the five percent growth rate of the overall national economy forever.[45]

Gorman contends the two-stage DCF model is more reliable because the 7.40 percent analyst growth rate is irrational in that it would project growth to be greater than the

---

[38] Gorman Surrebuttal, Ex. 506, Page 15, Line 22.

[39] Gorman Direct, Ex. 501, Page 18, Lines 21-22.

[40] Gorman Direct, Ex. 501, Page 18, Lines 6-11.

[41] Gorman Direct, Ex. 501, Page 19, Line 3.

[42] Gorman Direct, Ex. 501, Page 32, Line 11

[43] Gorman Direct, Ex. 501, Page 24, Lines 1-3.

[44] Ex. 229.

[45] Gorman Direct, Ex. 501, Page 19, Lines 11-14.

growth rate of the overall United States economy. Logically, the growth of a particular company cannot continue to exceed the growth rate of the overall economy forever because eventually the single company would overtake the entire economy.[46] However, that fact does not make Gorman's constant growth DCF model unreliable.

Investors use analysts' growth rates to value stocks in the marketplace and therefore analysts growth rates should be used to estimate the growth component of the DCF model. Companies do not have to grow at the same rate forever for the single-stage DCF model to be reasonable approximation of how prices are determined in capital markets.[47] Furthermore, Gorman's assumption that the companies will grow at the forecasted rate for five years instead of four or six years is essentially arbitrary.[48] As Vander Weide indicates, since investors use analysts' growth forecasts in making decisions to buy and sell stock, the analysts' growth forecasts should be used to estimate the growth component of the DCF model, whether or not Mr. Gorman believes those growth forecast are rational.[49]

Rather than simply being discarded, the results of Gorman's single-stage DCF model can reasonably be averaged against the results of his two-stage DCF model. The average of those two results is 10.5 percent.

Gorman's DCF analyses further understates an appropriate return on equity for Empire because he uses a smaller proxy group of comparable companies for his DCF analysis. As Vander Weide explains:

> It is desirable to choose a relatively large group of comparable risk companies because the estimate of the cost of equity obtained from applying

---

[46] Vander Weide Rebuttal, Ex. 29, Page 28, Lines 22-24.

[47] Vander Weide Rebuttal, Ex. 29, Page 29, Lines 1-7.

[48] Vander Weide Rebuttal, Ex. 29, Page 29, Lines 17-21.

[49] Vander Weide Surrebuttal, Ex. 30, Page 12, Lines 15-19.

> cost of equity methodologies to a single company is uncertain. ... However, the uncertainty in estimating the cost of equity by applying cost of equity methodologies to a single company can be significantly reduced by applying cost of equity models to a relatively large group of comparable risk companies.[50]

Both Gorman and Barnes used smaller proxy groups than the group used by Vander Weide. As Vander Weide indicates, the use of the largest possible group of comparable risk companies reduces the risk of selection bias and the risk of a less reliable result.[51] To his credit, Staff's witness Matt Barnes, attempted to create a proxy group that, although small, closely mirrors Empire's business profile[52]

Moreover, the proxy groups used by Vander Weide, Gorman and Barnes are all, on average, less risky than Empire. Each of the proxy groups has an average S&P bond rating of BBB+,[53] whereas Empire's current S&P bond rating is BBB-.[54] For determining an appropriate cost of equity, the difference between a BBB- rating and a BBB+ rating can add between 25 and 50 basis points to a reasonable return on equity.[55]

Furthermore, Vander Weide uses a Quarterly DCF model rather than the Annual DCF model used by both Barnes and Gorman. The Quarterly DCF model is based on the assumption that the comparable proxy companies pay quarterly dividends, while the Annual DCF model is based on the assumption that the comparable proxy companies pay annual dividends. In fact, all the proxy companies in Vander Weide's proxy group pay

---

[50] Vander Weide Rebuttal, Ex. 29, Pages 3-4, Lines 1-25, 28, 1-3.

[51] Vander Weide Rebuttal, Ex. 29, Page 4, Lines 7-13.

[52] Staff Report – Cost of Service, Ex. 204, Pages 13-14.

[53] Gorman Direct, Ex. 501, Page 15, Line 17; Vander Weide Rebuttal, Ex. 29, Page 7, Lines 1-5.

[54] Transcript, Page 468, Lines 1-3.

[55] Transcript, Page 475, Lines 8-10.

quarterly dividends,[56] as do those in Barnes' proxy group.[57] Although both Barnes and Gorman criticize Vander Weide's decision to use the Quarterly DCF model, it is a reasonable decision that enhances the credibility of his result.

The DCF model is a present value measure of investor expectations and, as demonstrated by the proxy groups compiled by all of the analysts, most of those companies pay quarterly dividends. That makes it reasonable to infer that investors expect quarterly payment of dividends. In other words, they expect dividends to be compounded, much the way interest is compounded. Therefore, the quarterly DCF model is the only model that correctly equates the present value of future dividends to the current stock price for companies that pay quarterly dividends.[58]

As a practical matter, the use of the Quarterly DCF model instead of the Annual DCF model has only a small effect. However, the difference between the two models amounts to five basis points with regard to the DCF analysis in Vander Weide's direct testimony.[59]

If the .25 percent adjustment for Empire's lower bond rating and the .05 percent adjustment for use of the Quarterly DCF model are added to the 10.5 percent average of Gorman's two DCF models, the result is a return on equity of 10.8 percent.

That brings the allowed return on equity into the range recommended by Staff's expert, who recommended a return ranging from 9.70 percent to 10.85 percent, with a mid-point of 10.28 percent.[60] Although a return on equity at 10.8 percent would be at the top

---

[56] Vander Weide Direct, Ex. 28, Page 18, Lines 22-25.

[57] Vander Weide Rebuttal, Ex. 29, Page 8, Lines 16-19.

[58] Vander Weide Surrebuttal, Ex. 30, Page 16, Lines 9-13.

[59] Vander Weide Surrebuttal, Ex. 30, Page 16, Lines 19-20.

[60] Barnes Rebuttal, Ex. 218, Page 2, Lines 10-11.

end of Staff's recommendation, Barnes testified that he would be in agreement with any return on equity within his recommended range.[61]

As a check on the reasonableness of proposed returns on equity, the Commission reviews regulatory decisions from around the country, as reported from surveys collected by Regulatory Research Associates. That report reveals the average allowed return on equity for electric utilities for 2007 was 10.36 percent, with a median return of 10.24 percent.[62]

The Regulatory Research Associates report also indicates the average return on equity allowed in 2007 to integrated electric utilities, excluding wires-only electric utilities, is 10.51 percent.[63] For the one-year period from April 2007 though March 2008, the average authorized return for integrated electric utilities is 10.6 percent.[64] For the six-month period from October 2007 through March 2008, the average authorized return for integrated electric utilities rose to 10.7 percent .[65]

As argued by Vander Weide, it is more appropriate to compare the return allowed to Empire to the 10.51 percent return on equity allowed in 2007 to integrated electric utilities, excluding wires-only electric utilities. Integrated electric utilities are generally more risky than wires-only electric utilities because integrated utilities are currently making large investments in electric generation plant, while wires-only utilities do not need to make such

---

[61] Transcript, Page 514, Lines 6-11.

[62] Ex. 230.

[63] Vander Weide Surrebuttal, Ex. 30, Page 10, Lines 3-11.

[64] Vander Weide Surrebuttal, Ex. 30, Page 10, Lines 20-22.

[65] Vander Weide Surrebuttal, Ex. 30, Page 10, Lines 15-16.

investments.[66] In addition, integrated electric utilities are responsible for operating generating plants and buying fuel to run those plants, which also increases the risk they face. In general, increased risk translates to an increased allowed return on equity, and regulatory agencies around the country have recognized that increased risk by allowing integrated electric utilities higher returns on equity.

Gorman criticized the proposed distinction between integrated and wires-only electric utilities, pointing out that it is possible for an integrated electric company to have a lower risk than a wires-only company. As an example, he pointed to wires-only electric utilities in Illinois that have a much higher level of risk than the integrated electric utilities in Missouri.[67] Certainly, individual wires-only electric utilities can have a high level of risk, as illustrated by the Illinois situation. However, the high level of risk in Illinois is attributable to political circumstances unique to that state. That does not change the fact that integrated electric companies are generally more risky than wires-only utilities.

Since Empire is an integrated electric utility, the best comparison is to the return on equity allowed to other integrated utilities. However, whether measured against the return on equity allowed to all electric utilities or just intergrated electric utilities, a return on equity of 10.8 percent is the one number most supported by the evidence in this case and well within either "zone of reasonableness."

Proposed Reduction for Fuel Adjustment Clause

In this Report and Order, the Commission is authorizing Empire to implement a fuel adjustment clause for the first time. Public Counsel and the Industrial Intervenors contend

---

[66] Vander Weide Surrebuttal, Ex .30, Page 10, Lines 5-7.

[67] Transcript, Pages 799-800, Lines 23-25, 1-17.

the allowed return on equity should be adjusted downward to recognize the decreased risk Empire will face because it now has a fuel adjustment clause.

There really is no dispute that the implementation of a fuel adjustment clause will reduce the level of operating risk that Empire faces. Empire's President and CEO, William Gipson, testified that he agreed with that point.[68] The question is whether the analysts' recommendations already take that decreased risk into account.

Fuel adjustment clauses are commonly used around the country, so most of the comparable companies included in the proxy groups used by the various return on equity analysts already have fuel adjustment clauses in place. For the proxy group used by Barnes on behalf of Staff, fifteen out of seventeen companies have a fuel adjustment clause,[69] twelve of the fifteen companies in Gorman's proxy group have fuel adjustment clauses,[70] and virtually all of the proxy group used by Vander Weide for Empire have fuel adjustment clauses.[71] Moreover, the overwhelming majority of the jurisdictions where traditional vertically-integrated utilities like Empire operate allow for the 100 percent pass-through of fuel and purchased power costs, which are the most significant costs Empire faces. This Report and Order will not allow Empire to pass-through 100 percent of those costs, meaning Empire will retain more risk than most comparable companies.

As indicated, most of the companies included in the proxy groups used by the analysts to estimate an appropriate return on equity for Empire already operate under a fuel

---

[68] Transcript, Page 230, Lines 22-25.

[69] Transcript, Page 515, Lines 9-16.

[70] Overcast Rebuttal, Ex. 10, Page 13, Lines 17-20.

[71] Transcript, Page 495, Lines 7-10.

adjustment clause. On that basis, Vander Weide for Empire, and Barnes for Staff,[72] agree no adjustments to their recommendations are necessary to recognize the implementation of a fuel adjustment charge.

Furthermore, the proxy groups used by all of the analysts are already less risky than Empire. Empire has a BBB minus bond rating from S&P, while the proxy companies have a BBB plus bond rating.[73] That means a fuel adjustment clause could make Empire less risky, while still not making it less risky than the proxy group of comparable companies. Hence, there is no reason to reduce the cost of equity indicated by an analysis of the proxy group.[74]

Conclusions of Law:

In assessing the Commission's ability to use different methodologies to determine just and reasonable rates, the Missouri Court of Appeals has said:

> Because ratemaking is not an exact science, the utilization of different formulas is sometimes necessary. ... The Supreme Court of Arkansas, in dealing with this issue, stated that there is no 'judicial mandate requiring the Commission to take the same approach to every rate application or even to consecutive applications by the same utility, when the commission in its expertise, determines that its previous methods are unsound or inappropriate to the particular application' (quoting *Southwestern Bell Telephone Company v. Arkansas Public Service Commission,* 593 S.W. 2d 434 (Ark 1980).[75]

Furthermore,

> Not only can the Commission select its methodology in determining rates and make pragmatic adjustments called for by particular circumstances, but it also may adopt or reject any or all of any witnesses' testimony.[76]

---

[72] Transcript, Page 527, Lines 15-25.

[73] Transcript, Page 466, Lines 3-7.

[74] Transcript, Page 466, Lines 17-25.

[75] *State ex rel. Assoc. Natural Gas Co. v. Public Service Commission,* 706 S.W. 2d 870, 880 (Mo. App. W.D. 1985).

[76] *Id.*

In another case, the Court of Appeals recognized that the establishment of an appropriate rate of return is not a "precise science":

> While rate of return is the result of a straight forward mathematic calculation, the inputs, particularly regarding the cost of common equity, are not a matter of 'precise science,' because inferences must be made about the cost of equity, which involves an estimation of investor expectations. In other words, some amount of speculation is inherent in any ratemaking decision to the extent that it is based on capital structure, because such decisions are forward-looking and rely, in part, on the accuracy of financial and market forecasts.[77]

Section 386.266, RSMo (Supp. 2007), the statute that allows the Commission to order Empire to implement a fuel adjustment clause, specifically allows the Commission to modify a company's allowed return on equity to reflect the implementation of a fuel adjustment clause. Specifically, subsection 7 of that statute provides that the Commission may:

> take into account any change in business risk to the corporation resulting from implementation of the adjustment mechanism in setting the corporation's allowed return in any rate proceeding, in addition to any other changes in business risk experienced by the corporation.

Decision:

As fully explained in its findings of fact, the Commission finds that the return on equity recommendation offered by Empire's witness, James Vander Weide, overstates the appropriate return on equity for Empire. Conversely, the return on equity recommendation offered by the Industrial Intervenors' witness, Michael Gorman, would deny the company an appropriate return. The appropriate return on equity is to be found between those extremes, within the recommended range offered by Staff's witness, Matthew Barnes.

---

[77] *State ex rel. Missouri Gas Energy v. Public Service Commission*, 186 S.W.3d 376, 383 (Mo App. W.D. 2005).

Based on the evidence in the record, on its analysis of the expert testimony offered by the parties, and on its balancing of the interest of the company's ratepayers and shareholders, the Commission finds that 10.8 percent is a fair and reasonable return on equity for Empire that will allow it to compete in the capital market for the funds needed to maintain its financial health.

2. The Proposed Fuel Adjustment Clause

Empire's Ability to Request a Fuel Adjustment Clause and the Motion to Reject Specified Tariff Sheets and Strike Testimony:

Before addressing whether a fuel adjustment clause is appropriate for Empire, the Commission must address a motion filed by the Industrial Intervenors on April 11, 2008, asking the Commission to reject those portions of Empire's tariff and testimony requesting implementation of a fuel adjustment clause. On May 1, the Commission indicated it would take up the issues raised in the Industrial Intervenors' motion as part of the case. While only the Industrial Intervenors filed a motion to strike, Public Counsel asserted the same arguments against implementation of a fuel adjustment clause.

The Industrial Intervenors and Public Counsel argue Empire is precluded from asking the Commission to implement a fuel adjustment clause because of a stipulation and agreement to which Empire was a party in Empire's 2004 rate case, ER-2004-0570. The Nonunanimous Stipulation and Agreement Regarding Fuel and Purchased Power Expense was filed on February 22, 2005, and was signed by three parties: Empire, Public Counsel, and Praxair and Explorer Pipeline Company - two of the three Industrial Intervenors in this case. No other party signed the stipulation and agreement, but no one objected to it. The

Commission deemed it to be unanimous, as permitted by the Commission's rules,[78] and approved it as part of the Report and Order that resolved Empire's rate case.[79]

The signatory parties agreed Empire should be able to collect an additional amount for changes in its fuel and purchased power costs through an Interim Energy Charge, subject to true-up and refund. The Interim Energy Charge was to remain in effect for a period of three years measured from the effective date of Empire's tariff implementing the Commission's decision in the rate case. That tariff went into effect on March 27, 2005,[80] so the Interim Energy Charge Period, by the terms of the stipulation and agreement, ended on March 27, 2008.

Paragraph 4 of the stipulation and agreement is the provision that Public Counsel and the Industrial Intervenors have cited in support of their position. That paragraph states:

> In consideration of the implementation of the IEC in this case and the agreement of the Parties to waive their respective rights to judicial review or otherwise challenge a Commission order in this case authorizing and approving the subject IEC, for the duration of the IEC approved in this case Empire agrees to forego any right it may have to request the use of, or to use, any other procedure or remedy, available under current Missouri statute or subsequently enacted Missouri statute, in the form of a fuel adjustment clause, a natural gas cost recovery mechanism, or other energy related adjustment mechanism to which the Company would otherwise be entitled. Empire also agrees not to request an Accounting Authority Order or other regulatory mechanism to accumulate and or recover any amount of variable fuel and purchased power cost that exceeds the IEC ceiling.

Empire filed its tariff in this case, including its request for implementation of a fuel adjustment clause, on October 1, 2007, which is within the Interim Energy Charge Period

---

[78] Commission Rule 4 CSR 240-2.115(2)(C).

[79] *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase,* Report and Order, 13 Mo P.S.C. 3d 350, 382 (March 10, 2005)

[80] *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase,* Order Approving Tariff in Compliance with Commission Order, Case No. ER-2004-0570 (March 21, 2005).

established in the stipulation and agreement. On that basis, Public Counsel and the Industrial Intervenors argue Empire is precluded from requesting a fuel adjustment clause in this case.

That is not, however, the end of the matter. Paragraph 1c of the stipulation and agreement establishes the duration of the Interim Energy Charge Period as ending three years after the effective date of Empire's implementing tariff, "unless earlier terminated by order of the Commission." In Empire's next rate case, ER-2006-0315, Empire asked the Commission to terminate the Interim Energy Charge because under the Interim Energy Charge it was under-recovering its fuel cost by $26.8 million per year.[81] In deciding to allow Empire to recover its fuel-costs in base rates, without application of the Interim Energy Charge, the Commission stated:

> The Commission concludes that it must determine just and reasonable rates based on what it deems to be Empire's prudently incurred costs. To the extent that the 2005 Stipulation limits recovery of Empire's prudently incurred fuel and purchased power expenses, then it attempts to limit one of the "factors which determine rates" and is overcome by the Commission's exercise of the police power granted to it. Moreover, the Commission concludes that its prior approval of the 2005 Stipulation in no way *estops* or hampers it in its determination of just and reasonable rates. The Commission concludes that Empire may recover the prudently incurred fuel and purchased power costs at the level determined above in base rates.[82]

That Report and Order took effect on December 31, 2006.[83]

---

[81] Empire also asked the Commission to implement a fuel adjustment clause as part of that rate case, but the Commission refused to consider that request because of the previously described provision in the 2005 stipulation and agreement.

[82] *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase,* Report and Order, Case No. ER-2006-0315 (December 21, 2006), page 44.

[83] The Commission issued a Report and Order Upon Reconsideration in Case No. ER-2006-0315 on March 26, 2008. The quoted language was unchanged in the revised Report and Order and is found on page 51. Requests for Rehearing have been filed regarding that Report and Order Upon Reconsideration, but the Commission is commanded to take no further action in that cause by a

The Commission's Report and Order rejected the tariff Empire had previously filed, so on December 27, 2006, Empire filed a new tariff in place of the tariff the Commission had rejected. The new tariff carried an effective date of January 27, 2007, but along with its revised tariff, Empire filed a motion asking the Commission to expedite its approval of the revised tariff so it could go into effect on January 1, 2007.[84] Despite the objections of some parties, the Commission issued an order on Friday afternoon, December 29, granting the expedited treatment and approving the tariff to be effective on Monday, January 1.[85]

On January 4, 2007, Public Counsel filed a petition for writ of mandamus with the Missouri Court of Appeals, which that court denied. Public Counsel then proceeded to the Missouri Supreme Court, which issued a preliminary writ on May 1, 2007. The Supreme Court made that writ permanent in an opinion issued on October 30, 2007.[86] In that opinion, the Supreme Court ordered the Commission to "vacate its order granting expedited treatment and approving tariffs issued on December 29, 2006 and allow public counsel reasonable time to prepare and file an application for rehearing on the tariffs."[87] Despite the Supreme Court's order, this dispute is still not resolved and the matter is once again

---

Writ of Mandamus issued by the Missouri Supreme Court on April 4, 2008, in Supreme Court Case No. SC89176. **The December 21, 2006, Report and Order has not been directly challenged at the Supreme Court.**

[84] *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase,* Motion for Expedited Consideration and Approval of Tariff Sheets Filed in Compliance with Commission Order on Less than Thirty Days' Notice, Case No. ER-2006-0315 (December 27, 2006).

[85] *In the Matter of the Tariff Filing of The Empire District Electric Company to Implement a General Rate Increase,* Order Granting Expedited Treatment and Approving Tariffs, Case No. ER-2006-0315 (December 29, 2006).

[86] *State ex rel. Office of the Public Counsel v. Pub. Serv. Comm'n*, 236 S.W.3d 632 (Mo 2007).

[87] Id. at 637.

before the Supreme Court on another Writ of Mandamus.[88]

The confusion in Empire's previous rate case is relevant because there is a disagreement about whether Empire's tariff purporting to implement the Report and Order in ER-2006-0315 and its early termination of the Interim Energy Charge ever became effective. Public Counsel and the Industrial Intervenors contend that if the Commission's December 29, 2006 order approving that tariff is vacated, the tariff never went into effect and the earlier tariff that includes the Interim Energy Charge must remain in effect. Empire contends that if the Commission's order approving its tariff is vacated, then the tariff went into effect by operation of law on its original effective date, January 27, 2007. As previously indicated, that dispute is currently before the Missouri Supreme Court and the Commission will not attempt to resolve that question in this case.

The Commission's decision to terminate the Interim Energy Charge in Case No. ER-2006-0315 still stands, so on that basis alone the Industrial Intervenors' motion is denied. Even if the Commission's previous decision to terminate the Interim Energy Charge is found not to be effective, the Commission still concludes that the possible continued existence of the 2005 Interim Energy Charge does not preclude the Commission from ordering Empire to implement a fuel adjustment clause in this case. As the Commission found in the previous rate case, the 2005 stipulation and agreement specifically provides that the Commission can order the Interim Energy Charge to be terminated early. Empire's severe under-earning due to rising fuel and purchased power cost, which was the basis for the Commission's decision to terminate the Interim Energy Charge in the last rate case, has continued. The evidence presented in this case demonstrated that between 2002 and

---

[88] Missouri Supreme Court Case No. SC89176.

2006, Empire's shareholders absorbed $85.5 million in fuel and purchased power costs that the company was unable to collect in rates.[89] Under these circumstances, as the Commission concludes elsewhere in this order, the Commission must implement a fuel adjustment clause in order to set just and reasonable rates that allow Empire the opportunity to earn its allowed return on equity as required by Section 393.150.2 RSMo 2000.

The language of the stipulation and agreement in ER-2004-0570 provides that Empire agreed to forego, for the duration of the Interim Energy Charge, any right it may have to request the use of a fuel adjustment clause. In its Report and Order in Empire's last rate, ER-2006-0315, the Commission accepted that the stipulation and agreement precluded Empire from requesting a fuel adjustment clause at that time. However, the situation at that time can be distinguished from the situation currently facing the Commission in that the Interim Energy Charge was still in effect at the time the Commission issued its Report and Order in ER-2006-0315. By any interpretation, the Interim Energy Charge Period expired on March 27, 2008, approximately five months before the rates that will result from the current rate case will go into effect.

If Public Counsel and the Industrial Intervenors' interpretation of the stipulation and agreement is to be accepted, it would mean that Empire was gagged from even broaching the subject of a fuel adjustment clause until after the Interim Energy Charge Period had expired, precluding it from having any sort of recovery mechanism in place for at least the eleven months it would take to complete a rate case filed the day after the Interim Energy Charge Period expired. Thus, in effect, the three-year Interim Energy Charge Period

---

[89] Staff Report - Cost of Service, Ex. 204, Page 61.

described in the stipulation and agreement would become a three-year-and-eleven-month period with no Interim Energy Charge or any other fuel adjustment clause allowed in the last eleven months. Regardless of what the parties may have intended when they signed the stipulation and agreement, a result that forbade Empire to have either an interim energy charge or a fuel adjustment clause for an additional eleven months would be contrary to the public interest in ensuring that Empire is allowed to charge just and reasonable rates.

For the foregoing reasons, the Commission concludes Empire is not precluded from requesting a fuel adjustment clause and therefore will deny the Motion to Reject Specified Tariff Sheets and Strike Testimony.

General Findings of Fact Regarding Fuel Adjustment Clauses:

The rates Empire will be allowed to charge its customers are based on a determination of the company's revenue requirement. A revenue requirement is based on the costs and income the company experienced during a historical test year. For this case, the test year was established as the 12-month period ending on June 30, 2007, updated through December 31, 2007, with an additional true-up period through February 29, 2008. That means the Commission will use the expenses and revenues measured during the test year to predict the expenses the company will be allowed to recover in future rates. Expenses possibly incurred in the future generally are not included in the rate calculations.

Under traditional ratemaking procedures, at the end of the rate case the Commission establishes the rates an electric utility can charge. Once rates are established, the utility cannot change those rates without filing a new rate case and restarting the review process. However, in 2005, the Missouri legislature passed a law allowing the Commission to establish a mechanism to allow an electric utility to make periodic rate adjustments outside

of general rate proceedings to reflect increases and decreases in its prudently incurred fuel and purchased-power costs.[90] The sort of mechanism envisioned by the statute is generally known as a fuel adjustment clause. Empire has requested a fuel adjustment clause in this case.

Requests from Missouri electric utilities for implementation of a fuel adjustment clause are a relatively recent development because of the recent statutory change. However, fuel adjustment clauses are frequently allowed by utility commissions in other states.[91] Even the Industrial Intervenors' witness, Michael Gorman quoted a Standard & Poors report that stated: "of comparable significance to supporting credit quality is regulatory approval for timely recovery of fuel costs, especially in an environment of elevated commodity prices."[92] Indeed, this statute and the accompanying rules have merely transported Missouri back into the mainstream of utility regulation. That mainstream of regulation recognizes that it is impossible for a utility to earn its allowed return on equity in a rising cost environment without a fuel adjustment clause.

While the new statute, Section 386.266, allows the Commission to approve a fuel adjustment clause, in effect, overturning a 1979 Missouri Supreme Court decision finding fuel adjustment clauses to be contrary to Missouri law for residential customers,[93] the statute does not require the Commission to approve a fuel adjustment clause. Instead, it specifically gives the Commission authority to reject a proposed fuel adjustment clause

---

[90] Section 386.266, RSMo (Supp. 2007).

[91] Overcast Direct, Ex. 8, Pages 22-23, Lines 21-23, 1-10. *See also*, Overcast Rebuttal, Ex. 10, Schedule HEO-1.

[92] Gorman Direct, Ex. 501, Page 7, Lines 34-37.

[93] *State ex rel. Utility Consumers Council of Mo., Inc. v. Pub. Serv. Comm'n*, 585 S.W.2d 41 (Mo. banc 1979).

after giving an opportunity for a full hearing in a general rate case.[94] The statute, while not providing specific guidance on when a fuel adjustment clause should be approved, does provide some guidance on when such a clause is appropriate. Specifically, it indicates any such fuel adjustment clause must be reasonably designed to provide the utility with a sufficient opportunity to earn a fair return on equity.[95]

There are circumstances when the use of a fuel adjustment clause may be appropriate to preserve the financial health of the utility, and no one, including ratepayers, benefits when a utility becomes financially unhealthy. In an era where fuel costs are highly volatile, a fuel adjustment clause may be appropriate if the company is to earn its authorized rate of return. The problem then is how to determine when a fuel adjustment clause is appropriate.

General Conclusions of Law Regarding Fuel Adjustment Clauses:

Section 386.266.1, RSMo (Supp. 2007), the statute that allows the Commission to establish a fuel adjustment clause provides as follows:

> Subject to the requirements of this section, any electrical corporation may make an application to the commission to approve rate schedules authorizing an interim energy charge or periodic rate adjustments outside of general rate proceedings to reflect increases and decreases in its prudently incurred fuel and purchased-power costs, including transportation. The commission may, in accordance with existing law, include in such rate schedules features designed to provide the electrical corporation with incentives to improve the efficiency and cost-effectiveness of its fuel and purchased-power procurement activities.

Subsection 4 of that statute sets out some of the provisions that must be included in a fuel adjustment clause as follows:

---

[94] Section 386.266.4, RSMo (Supp. 2007).

[95] Section 386.266.4(1), RSMo (Supp. 2007)

> The commission shall have the power to approve, modify, or reject adjustment mechanisms submitted under subsections 1 to 3 of this section only after providing the opportunity for a full hearing in a general rate proceeding, including a general rate proceeding initiated by complaint. The commission may approve such rate schedule after considering all relevant factors which may affect the cost or overall rates and charges of the corporation, provided that it finds that the adjustment mechanism set forth in the schedules:
>
> *(1) Is reasonably designed to provide the utility with a sufficient opportunity to earn a fair return on equity;*
>
> (2) Includes provisions for an annual true-up which shall accurately and appropriately remedy any over- or under-collections, including interest at the utility's short-term borrowing rate, through subsequent rate adjustments or refunds;
>
> (3) In the case of an adjustment mechanism submitted under subsections 1 and 2 of this section, includes provisions requiring that the utility file a general rate case with the effective date of new rates to be no later than four years after the effective date of the commission order implementing the adjustment mechanism. ...
>
> (4) In the case of an adjustment mechanism submitted under subsections 1 or 2 of this section, includes provisions for prudence reviews of the costs subject to the adjustment mechanism no less frequently than at eighteen-month intervals, and shall require refund of any imprudently incurred costs plus interest at the utility's short-term borrowing rate. (emphasis added)

Subsection 4(1) is emphasized because that is the key requirement of the statute. Any fuel adjustment clause the Commission allows Empire to implement, must be reasonably designed to allow the company a sufficient opportunity to earn a fair return on equity;

Subsection 7 of the fuel adjustment clause statute provides the Commission with further guidance, stating the Commission may:

> take into account any change in business risk to the corporation resulting from implementation of the adjustment mechanism in setting the corporation's allowed return in any rate proceeding, in addition to any other changes in business risk experienced by the corporation.

Finally, subsection 9 of that statute requires the Commission to promulgate rules to "govern the structure, content and operation of such rate adjustments, and the procedure for the submission, frequency, examination, hearing and approval of such rate adjustments." In

compliance with the requirements of the statute, the Commission promulgated Commission Rule 4 CSR 240-3.161, which establishes in detail the procedures for submission, approval, and implementation of a fuel adjustment clause.

Is a Fuel Adjustment Clause Appropriate?

Findings of Fact:

The Commission addressed the question of when a fuel adjustment clause is appropriate in recent rate cases for two other Missouri electric utilities. In both cases, the Commission accepted three criteria for determining whether an electric utility should be allowed to implement a fuel adjustment clause. The Commission concluded that a cost or revenue change should be tracked and recovered through a fuel adjustment clause only if that cost or revenue change is:

1. Substantial enough to have a material impact upon revenue requirements and the financial performance of the business between rate cases;
2. beyond the control of management, where utility management has little influence over experienced revenue or cost levels; and
3. volatile in amount, causing significant swings in income and cash flows if not tracked.[96]

After applying those criteria, the Commission found that fuel costs for AmerenUE, which derived most of its power through its own coal or nuclear-fired generating plants, were not sufficiently volatile to justify the use of a fuel adjustment clause.[97] Aquila, in contrast to AmerenUE, derived much of its power through natural gas-fired generating plants and purchased power. In those circumstances, the Commission concluded that

[96] *In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service*, Report and Order, Case No. ER-2007-0002, May 22, 2007, Pages 20-21.

[97] *In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service*, Report and Order, Case No. ER-2007-0002, May 22, 2007, Page 26.

Aquila would be allowed to implement a fuel adjustment clause.[98]

Applying that three-part test to Empire, it is clear that Empire's fuel and purchased power cost is substantial. For Empire's proposed test year revenue requirement calculation, the cost of fuel and purchased power equals 37.63 percent of the company's revenue requirement.[99] Over the past 5 years, Empire's fuel costs have increased by seventy percent.[100] Staff estimated that between 2002 and 2006, Empire's shareholders had to absorb approximately $85.5 million of fuel and purchased power costs between rate cases.[101] Because of rising fuel costs, Empire's actual earned return on equity in 2006 was about nine percent. In 2007 that dropped to only about seven percent.[102]

A very high percentage of Empire's need for electricity is met through gas-fired generation and spot purchased power. Those percentages are significantly higher for Empire than they were for Aquila, which the Commission allowed to implement a fuel adjustment clause in its recent rate case.[103] Natural gas and spot purchased power are traded in competitive markets. As a result, Empire has little control over the market price it pays for those commodities.[104]

Fuel and purchased power costs have certainly been volatile in recent years. Between 2005 and 2006, Empire's fuel costs increased from $128 million to $171 million.

---

[98] *In the Matter of the Tariffs of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks – L&P Increasing Electric Rates,* Report and Order, Case No. ER-2007-0004, (May 17, 2007), Page 37.

[99] Overcast Direct, Ex. 8, Page 5, Lines 21-22.

[100] Transcript, Page 236, Lines 12-16.

[101] Staff Report – Cost of Service, Ex. 204, Page 61.

[102] Transcript, Page 240, Lines 16-25.

[103] Staff Report – Cost of Service, Ex. 204, Page 61.

[104] Overcast Direct, Ex. 8, Page 12, Lines 18-20.

Of course, such costs can also decline, as they did in 2002 and 2003.[105] The level of volatility is particularly high for natural gas, the purchase of which consumes 38 percent of the dollars Empire spends on the purchase of fuel and purchased power.[106]

Public Counsel suggests Empire should not be allowed to implement a fuel adjustment clause in this case because: 1) rates set in this case are likely to remain in effect only for 21 months; (2) Empire's base level of fuel costs is derived from models of likely fuel costs for all of 2008, so the first four months of the 21 months are based on current fuel costs; 3) Empire is protected against extreme fuel price volatility by long-term contracts and hedging arrangements; and 4) starting in January 2009, Empire will begin receiving wind energy under a new purchased power agreement.[107]

Public Counsel's arguments are flawed and unpersuasive. First, even though the rates are likely to remain in effect for only 21 months, Empire's past experience has shown that fuel and purchased power costs can swing a great deal in 21 months. Second, if the first four months are based on estimated fuel costs for 2008, the remaining 17 months are subject to volatile fuel prices. Third, Empire's long-term contracts and hedging arrangements do not provide complete protection against fuel cost volatility. Empire's variable fuel and purchased power costs for the trued-up test year amounted to over $151 million,[108] and large portions of those costs remain unhedged.[109] Fourth and finally, the wind energy Empire will obtain from the Meridian Way wind farm will provide more stability in Empire's energy supply but will meet only a small portion of the company's energy

[105] Overcast Direct, Ex. 8, Page 8, Table 1.

[106] Staff Report – Cost of Service, Ex. 204, Page 61.

[107] Kind Rebuttal, Ex. 303, Pages 6-7, Lines 12-22, 1-15.

[108] Oligschlaeger True-Up Direct, Ex. 233, Page 4, Lines 9-12.

[109] Overcast Surrebuttal, Ex. 11, Page 8, Lines 7-17.

needs, covering only about three percent of Empire's energy needs after accounting for predicted growth.[110]

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

The evidence demonstrates that Empire's situation meets the Commission's three-prong test for determining whether a fuel adjustment clause is appropriate Empire's fuel and purchased-power costs are a substantial portion of the company's costs and variations in those costs can rapidly eat up the returns the company could otherwise earn. A large portion of Empire's fuel costs are used to purchase natural gas, a product that is traded in a competitive marketplace over which Empire can exercise little control. Finally, the price of the natural gas Empire needs to generate much of its electricity is volatile. Given current market conditions observed by the Commission in this case, it would be impossible for Empire to earn its Commission allowed return on equity without a fuel adjustment clause. Under the circumstances, a fuel adjustment clause is appropriate to give Empire an opportunity to earn a reasonable return on its investment.

Appropriate Incentive Mechanism

Findings of Fact:

The statute that authorizes the Commission to establish a fuel adjustment clause for Empire already includes features designed to give the company an incentive to maximize its income and minimize its costs. Specifically, the statute requires a utility operating under a fuel adjustment clause to file a new rate case every four years, and requires the

[110] Overcast Surrebuttal, Ex. 11, Page 9, Lines 9-23.

Commission to review the prudence of the company's purchasing decisions every 18 months. But regulatory reviews are only a partial substitute for the direct incentives that can result from a utility's quest for profit. Therefore, the statute allows the Commission to include features "designed to provide the electrical corporation with incentives to improve the efficiency and cost-effectiveness of its fuel and purchased-power procurement activities."[111]

Approximately seventeen states do not have fuel adjustment mechanisms because they have passed some form of deregulation allowing wholesale electric generators to recover those costs. Of the states that allow fuel adjustment clauses, the vast majority of those states allow 100 percent pass-through of fuel costs.[112] In fact, Maurice Brubaker, witness for the Industrial Intervenors, could only identify four other states besides Missouri that had ever allowed less than a 100 percent pass through of fuel and purchased power costs as an incentive mechanism.[113] Brubaker also explained that when less than 100 percent pass-through of costs is allowed, the fuel adjustment clauses used in other states usually allow a fairly high rate of pass-through so the utility can recover a substantial portion of its rising fuel costs. He testified that the allowed pass-through rate is in the "80 to 90, 95 percent range".[114]

Empire proposed the Commission use the same incentive mechanism it used when

---

[111] Section 386.266.1, RSMo (Supp. 2007).

[112] Overcast Rebuttal, Ex. 10, Schedule HEO-1. For example, Oklahoma's statute that authorizes the use of a fuel adjustment clause does not authorize the use of incentive mechanisms and presumes the actual cost of fuel will be passed to consumers. 17 Okl. St. Ann. Section 251.

[113] *See generally*, Ex. 32.

[114] Transcript, Page 778, Lines 8-15.

it established a fuel adjustment clause for Aquila in that company's recent rate case.[115] The Aquila fuel adjustment clause included a 95 percent pass-through provision.[116] That means only 95 percent of any over or under recovery balance, measured against a base level, would be passed to customers under the fuel adjustment clause.[117] The other 5 percent would be absorbed by Empire's shareholders.

All parties agree the appropriate base level is the normalized fuel and purchased power costs estimated for this case.[118] That amount was approximately $174.3 million,[119] and represents a forecast of fuel costs for calendar year 2008.[120]

Empire's fuel and purchased power costs have increased by substantial amounts in recent years. In 2001, those costs increased by over $28 million and in 2006, they increased by over $44 million.[121] Assuming costs could increase another $20 million, a five percent pass-through would cost Empire $1 million, an amount equal to almost three percent of Empire's net earnings and 17 basis points of its allowed return on equity.[122]

The other parties proposed similar incentive mechanisms at different levels. Staff calculated that over the four years between 2002 and 2006, Empire's shareholders actually absorbed approximately 60 percent of increased fuel and purchased power costs, with the other 40 percent flowing through to customers. Thus, any pass through of costs under a

---

[115] Transcript, Page 637, Lines 4-7.

[116] *In the Matter of the Tariffs of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks – L&P Increasing Electric Rates,* Report and Order, Case No. ER-2007-0004, (May 17, 2007), Page 54.

[117] Keith Direct, Ex. 2, Page 26, Lines 16-17.

[118] Transcript, Page 669, Lines 1-4.

[119] Transcript, Page 738, Lines 10-13.

[120] Overcast Rebuttal, Ex. 10, Page 8, Line 13.

[121] Overcast Direct, Ex. 9, Page 8, Table 1.

[122] Brubaker Surrebuttal, Ex. 505, MEB Schedule 1.

fuel adjustment clause greater than 40 percent would shift the risk of rising fuel prices from the company to its customers. Recognizing that the purpose of a fuel adjustment clause is to shift some risk to customers, Staff proposed to allow Empire to pass through between 60 and 80 percent of costs, with 70 percent as a recommended mid-point.[123]

Public Counsel contends Empire does not need to have a fuel adjustment clause at this time. But if a fuel adjustment clause were ordered, Public Counsel would limit the pass-through to the low end of Staff's range, 60 percent.[124]

The Industrial Intervenors' witness, Maurice Brubaker, proposed a more complicated plan that incorporated a limited pass-through of costs. Initially, in his direct testimony, Brubaker proposed a fuel adjustment clause using a base level surrounded by a $1.2 million symmetrical dead band, followed on each side by two symmetrical sharing bands. For the first $6.0 million, 90 percent of costs or savings would be passed to customers. For the next $6.0 million, 80 percent of costs would be passed to customers. For variations beyond the sharing bands, pass-through would be 100 percent. The maximum impact on Empire's shareholders would be limited to $3 million.[125]

In his surrebuttal testimony, Brubaker proposed an alternative incentive plan that eliminates the $1.2 million dead band and replaces it with two sharing bands. For the first $20 million deviation from base, 95 percent of the deviation is passed to customers. For the next $20 million, the sharing is 90 percent to customers and 10 percent to shareholders. For deviations greater than approximately $40 million (31 percent from base), the pass-through is 100 percent. This plan still caps the maximum impact on

---

[123] Staff Report – Cost of Service, Ex. 204, Pages 62-63.

[124] Kind Rebuttal, Ex. 303, Page 11, Lines 7-16.

[125] Brubaker Rebuttal, Ex. 502, Page 8, Lines 4-24.

Empire's shareholders at $3 million.

The goal of all these pass-through plans is to ensure that Empire retains sufficient financial incentive to make a strong effort to reduce its fuel and purchased power costs. If all such costs can be passed 100 percent to customers, Empire's incentive to control those costs is reduced.

The statute that allows the Commission to approve a fuel adjustment clause contains some protections to ensure the electric utility acts prudently to control its costs. Notably, it requires the Commission to undertake periodic prudence reviews of the company's incurred costs.[126] Empire suggests a prudence review is the only incentive it needs to control its fuel costs and that therefore a 100 percent pass-through plan would be appropriate.[127] However, an after-the-fact prudence review is not a substitute for an appropriate financial incentive, nor is an incentive provision intended to be a penalty against the company. Rather, a financial incentive recognizes that fuel and purchased power activities are very complex and there are actions that Empire can take that will affect the cost-effectiveness of those activities.

A prudence review is necessarily limited by the availability of trained people with the time available to devote to a detailed examination of the company's actions. The Commission does not doubt that its Staff will do a good job of conducting a prudence review, but there are limits on the ability of Staff to uncover exactly all the records and data needed to establish whether a given decision is prudent.[128] A prudence review can be expected to evaluate the major decisions a utility makes. However, an electric utility makes

---

[126] Section 386.266.4(4), RSMo (Supp. 2007).

[127] Overcast Direct, Ex. 8, Page 26, Lines 17-23.

[128] Transcript, Page 682, Lines 7-19.

thousands of small decisions every hour regarding fuel, purchased power, and off-system sales.[129] It is not practical to expect a prudence review to uncover and evaluate every one of those decisions.

In her surrebuttal testimony, Staff's witness Lena Mantle analogized Empire to a driver of a company car. If the company provides the driver with 100 percent reimbursement for any fuel he uses while driving the car, the driver is not likely to pay close attention to how far he drives, how much the gas costs, or whether the car is running efficiently. However, the driver's attention to those details will increase if he is required to pay a portion of the cost of the fuel he uses.[130] At the hearing, Empire asked Mantle whether her hypothetical driver would pay more attention to fuel costs if he had to justify every trip he took, every mile he drove, and how well he maintained his car, or face a requirement to repay a portion of his fuel costs.[131] As Mantle acknowledged, such a prudence review would assure that the driver was not blatantly wasting fuel.

To continue the analogy, such a review would ensure that the driver did not take an unauthorized joy ride to Las Vegas. However, a prudence review could not be detailed enough to discover whether the driver took the optimal route to work. It certainly could never determine whether the driver wasted gas by accelerating fast from stop lights. It is that sort of small, but cumulatively significant, decisions that are addressed by requiring Empire to have a financial stake in its fuel and purchased power decisions.

So some sort of financial incentive is needed to ensure that Empire pays close attention to its fuel and purchased power costs, and to remind Empire that a fuel

---

[129] Transcript, Pages 710-711, Lines 14-25, 1-24.

[130] Mantle Surrebuttal, Ex. 213, Page 3, Lines 10-16.

[131] Transcript, Page 657, Lines 5-16.

adjustment clause is a privilege, not a right, which can be taken away if the company does not act prudently. Staff's proposal restricting Empire to a 70 percent pass-through ensures Empire will not be able to recover its reasonable and prudent costs of service if, as expected, fuel costs rapidly rise. Staff calculated that from 2002 through 2006, Empire absorbed $85.5 million in fuel and purchased costs above the costs it was allowed to recover in rates.[132] Under Staff's 70 percent pass-through incentive proposal, Empire would still be required to absorb 30 percent, or $25.65 million of those costs over the previous four-year period. Under Public Counsel's 60% pass-through proposal, Empire would have absorbed 40 percent, or $34.2 million of those costs over the previous four year period. Such a great percentage of reduction would effectively prohibit Empire from earning its allowed return on equity and discourage investment at a time when Empire needs tens of millions of dollars in new capital investment.

Brubaker's proposal from his direct testimony is flawed in that the dead band, in the expected rising cost situation, would cost Empire $1.2 million from the start. Thereafter, it would cost the company five percent for the next $20 million in increased costs, potentially another $1 million. As a result, Empire will be denied a sufficient opportunity to earn a fair return on equity.

Brubaker's proposal from his surrebuttal testimony allows Empire to recover a greater proportion of its costs than would Staff and Public Counsel's proposals, but its flaw is its unnecessary complexity. Absorption of five percent of any excess fuel costs above the base level by Empire is sufficient incentive to improve the efficiency and cost effectiveness of its fuel and purchased power procurement activities and to allow Empire

[132] Staff Report – Cost of Service, Ex. 204, Page 61.

the opportunity to actually earn the return on equity awarded by this Commission.

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Empire's fuel adjustment charge shall include an incentive clause providing that 95 percent of any deviation in fuel and purchased power costs from the base level agreed to by the parties shall be passed to customers and 5 percent shall be retained by Empire. This incentive clause will give Empire a sufficient opportunity to earn a fair return on equity as required by Section 386.266 and the Hope and Bluefield decisions. At the same time, it will protect Empire's customers by giving the company an incentive to be prudent in its decisions by not allowing all costs to simply be passed through to customers.

Other Details About the Fuel Adjustment Clause

Two or more parties disagree about several particular elements of the Fuel Adjustment Clause to be established by Empire. The Commission will separately identify and address each of those elements.

Unit Train and Fuel Handling Costs:

Findings of Fact:

Maurice Brubaker, witness for the Industrial Intervenors, contends unit train costs and fuel handling costs should not be included in the fuel adjustment charge pass-through because such costs are basically fixed or demand-related costs that are not volatile and are controllable by the utility.[133] He also points out that inclusion of demand-related costs in a

---

[133] Brubaker Surrebuttal, Ex. 505, Page 8, Lines 10-17.

fuel adjustment clause would disproportionately burden high load factor customers.[134]

Empire's witness, W. Scott Keith, persuasively explained that unit train costs are included as a component of coal costs and flow through the fuel inventory to the income statement as the coal is consumed. If those costs were excluded from the fuel adjustment clause, the differences between the fuel costs for coal recorded on Empire's books would differ from the fuel costs for coal included in the fuel adjustment clause, requiring reconciliation each time a filing is made.[135] Unit train costs represent only about one percent of overall energy costs and are relatively stable compared to gas price fluctuations.[136] Similarly, exclusion of fuel handling costs would contribute to reconciliation problems between Empire's general ledger costs and those costs included in the fuel adjustment clause.[137]

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Unit train costs and fuel handling costs are relatively small costs that are intertwined with larger and more volatile fuel costs. Excluding them from the fuel adjustment clause would increase the burden on those persons at Empire and on Staff who will have to periodically audit Empire's accounts and the fuel adjustment clause. Under the circumstances, unit train costs and fuel handling costs shall be included in the fuel adjustment clause.

---

[134] Brubaker Surrebuttal, Ex. 505, Page 10, Lines 10-17.

[135] Keith Rebuttal, Ex. 3, Page 7, Lines 7-16.

[136] Keith Rebuttal, Ex. 3, Page 7, Lines 15-16.

[137] Keith Rebuttal, Ex. 3, Page 7, Lines 17-19.

Natural Gas Pipeline Demand Charges:

Findings of Fact:

Brubaker for the Industrial Intervenors would exclude natural gas demand charges from the fuel adjustment clause, again because they are fixed-costs that are not volatile.[138] The demand charges associated with fuel costs represent natural gas pipeline demand charges that are part of the transportation and storage tariffs of suppliers. Those charges are regulated by the FERC and can be changed by the pipelines on short notice. Empire has no control over the tariff filings that can be made to increase those charges and those tariff changes and resulting cost increases can be effective as quickly as 31 days after filing.[139]

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Empire has demonstrated that natural gas pipeline demand charges are volatile despite being regulated by FERC. Natural gas pipeline demand charges shall be included in the fuel adjustment clause.

Emission Allowance Costs

Findings of Fact:

Brubaker for the Industrial Intervenors would exclude emission allowance costs from the fuel adjustment clause because they are environmental-related costs and should be recovered through an environmental cost recovery mechanism as allowed by a rule the

[138] Brubaker Surrebuttal, Ex. 505, Page 7, Lines 21-22.

[139] Overcast Rebuttal, Ex. 10, Page 12, Lines 1-10.

Commission has recently adopted.[140] Public Counsel also opposes the inclusion of these costs in the fuel adjustment clause because to do so would violate the regulatory plan stipulation and agreement the Commission approved in Case No. EO-2005-0263.[141] That stipulation and agreement requires Empire to record the proceeds of emission allowance transactions in an account that is to be treated as a regulatory liability to be used as an offset to rate base in any future rate case.[142]

Empire contends it is appropriate to include the emission allowance costs in the fuel adjustment clause because there was no alternative mechanism for the recovery of those costs in place at the time it filed its rate case. Furthermore, it contends net emissions costs or allowances are energy related costs that are properly included in a fuel adjustment clause.[143]

Conclusions of Law:

Section 386.266.2 RSMo (Supp. 2007) allows an electric utility to apply to the Commission to establish a rate adjustment mechanism "to reflect increases and decreases in its prudently incurred costs, whether capital or expense, to comply with any federal, state, or local environmental law, regulation or rule." The statute further states: "any rate adjustment made under such rate schedules shall not exceed an annual amount equal to two and one-half percent of the electrical ... corporation's Missouri gross jurisdictional revenues, ...".

The Commission has recently promulgated a rule allowing for the establishment of

---

[140] Brubaker Surrebuttal, Ex. 505, Page 8, Lines 1-6. The rule to which Brubaker refers is 4 CSR 240-20.091, which became effective on June 30, 2008.

[141] Kind Rebuttal, Ex. 303, Page 10, Lines 8-20.

[142] Kind Rebuttal, Ex. 303, Page 10, Lines 15-20.

[143] Overcast Rebuttal, Ex. 10, Pages 12-13, Lines 16-23, 1.

an Environmental Cost Recovery Mechanism (ECRM) to implement the provisions of the statute. That rule, 4 CSR 240-20.091, became effective on June 30, 2008.

Decision:

Emission allowance costs shall be included in the fuel adjustment clause. Such costs are an implied tax on the use of a particular fuel, generally vary with the amount of fuel consumed and are beyond Empire's control.[144] It is reasonable to allow Empire to recover those costs through a fuel adjustment type mechanism. The ECRM mechanism was not available at the time Empire filed its rate case so it is reasonable to allow those costs to be included in the fuel adjustment clause the Commission is approving in this case.

Public Counsel's argument that an alternative treatment of those costs is required by the stipulation and agreement in Case No. EO-2005-0263 is not persuasive. That language requires a specific method of emission revenue accounting until a Commission decision is reached regarding the appropriate accounting for that revenue.[145] The Commission's decision in this case supersedes the temporary accounting method set out in the earlier stipulation and agreement.

Heat Rate Testing of Generation Plants:

Commission Rule 4 CSR 240-3.161(2)(P) requires that a proposed schedule, testing plan, and written procedures for heat rate or efficiency tests of a utility's generating facilities accompany any request for a fuel adjustment clause. Empire worked with Staff to develop a testing plan acceptable to Staff.[146] This issue is resolved so the Commission will not address it further.

---

[144] Overcast Rebuttal, Ex. 10, Page 12, Lines 17-19.

[145] Keith Surrebuttal, Ex. 4, Pages 10-11, Lines 20-22, 1-6.

[146] Transcript, Pages 725-728.

Rate Design of the Fuel Adjustment Clause:

Findings of Fact:

This issue concerns the details of the tariff that will actually implement Empire's fuel adjustment clause. Those details are included in tariff sheets attached to the direct testimony of Empire's witness W. Scott Keith as Schedule WSK-3.[147] Staff disagreed with some of the details of that tariff. At the hearing, Empire offered a revised tariff into evidence that Staff agreed accurately reflected Staff's fuel adjustment clause proposal.[148]

The biggest difference between Staff and Empire's proposals, aside from the incentive clause provision that has already been addressed, appears to have been Staff's proposal to adjust Empire's base cost of fuel by season. Empire contends the seasonal cost variance is small and does not warrant the adjustment proposed by Staff.[149] Staff contends the seasonal adjustment will tend to moderate fluctuations that might otherwise occur in the fuel adjustment collections.[150]

In its post-hearing brief, Empire indicates its willingness to accept Staff's version of the fuel adjustment clause tariff entered into evidence as Exhibit 31, except for Staff's proposed 70/30 pass-through proposal.[151]

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Staff's proposal to seasonally adjust Empire's cost of fuel is reasonable as a means

---

[147] Keith Direct, Ex. 2, Schedule WSK-3.

[148] Ex. 31, Transcript, Page 650, Lines 15-20.

[149] Keith Rebuttal, Ex. 3, Page 4, Lines 4-10.

[150] Staff Class Cost-of-Service and Rate Design Report, Ex. 211, Page 8.

[151] Post-Hearing Brief of The Empire District Electric Company, Page 46.

of reducing fluctuations and shall be adopted. The parties apparently agree that the exemplar tariff prepared to Staff's specifications is acceptable except for the incentive clause. The Commission has previously described the incentive clause that should be included in the fuel adjustment clause. Therefore, the tariff prepared to reflect Staff's proposals and entered into evidence as Exhibit 31, shall be incorporated into Empire's compliance tariff filing, except as otherwise modified in this Report and Order.

3. Off-System Sales Margin

Discussion:

Most of the electric energy Empire produces at the power plants it owns is sold to its native load customers, in other words, the people and businesses located within its service territory. However, if it can produce more energy than it needs to serve its native load, Empire is able to earn extra revenue by selling excess energy to off-system buyers, such as other utilities, municipalities, or cooperatives. Since the power Empire is able to sell is produced by generating plants paid for by ratepayers, profits (revenues less incurred fuel costs) from these off-system sales should be recognized as a reduction to the company's revenue requirement. For purposes of this case, the Commission must determine the amount of off-system sales margin to be included when calculating the amount of revenue Empire should be allowed to recover in rates.

Empire proposes that its off-system sales should be netted against its fuel costs as part of a fuel adjustment clause.[152] In other words, net revenue from off-system sales would be balanced against fuel costs, with rates varying up or down based upon the

[152] Keith Surrebuttal, Ex. 4, Page 5, Lines 1-6.

amount of the margin.[153] The inclusion of off-system sales as a component in a fuel adjustment clause was supported by Staff,[154] and the Industrial Intervenors,[155] and is not opposed by any party.[156]

The inclusion of off-system sales as a component of the fuel adjustment clause decreases the importance of the figure to be included in base rates for calculating off-system sales because actual sales will be flowed to customers through the fuel adjustment clause. However, selection of a reasonable base number is still important. If the estimate of off-system sales margins included in base rates is higher than Empire actually achieves, then future fuel-adjustment-clause related rate increases would likely be greater than would otherwise be the case.

Findings of Fact:

Empire initially proposed to use a five-year average of its off-system sales margin as the basis for establishing the off-system sales margin number to be included in base rates. Off-system sales margin for the last five years are as follows:[157]

Twelve Months Ended	Gross Profit (Margin)
June 30, 2003	$5,645,701
June 30, 2004	$2,023,298
June 30, 2005	$1,903,970
June 30, 2006	$3,798,127
June 30, 2007	$3,920,823

[153] Transcript, Page 154, Lines 12-18.

[154] Mantle Rebuttal, Ex. 214, Page 4, Lines 5-6.

[155] Brubaker Direct on Fuel Adjustment Clause/Revenue Requirement, Ex. 500, Page 4, Lines 18-20.

[156] Public Counsel opposes the establishment of a fuel adjustment clause, but does not oppose the inclusion of off-system sales in such a clause if one is established. *See*, Kind Rebuttal, Ex. 303, Page 9, Lines 21-24.

[157] Keith Surrebuttal, Ex. 4, Page 9, Line 2.

The five-year average would thus be $3,458,384.[158]

Staff proposed to determine the off-system sales margin number by totaling Empire's off-system sales margin for the first six months of 2007, and multiplying that number by two, arriving at a proposed off-system sales margin base number of $4,415,779.[159] Subsequently, Empire indicated its willingness to accept Staff's figure.[160]

Public Counsel initially proposed to use Empire's off-system sales margin for calendar year 2007 - $5,955,336 - as the basis for projecting the off-system sales margin Empire can be expected to earn in the future.[161] The true-up audit revealed that for the twelve months ending February 29, 2008, Empire earned an off-system sales margin of $6,116,915. Public Counsel now recommends the Commission use that figure as the base for Empire's anticipated off-system sales margin.[162]

The number proposed by Public Counsel is much higher than the five-year average of off-system sales margin Empire has been able to earn in the past. However, there was an important change in the available off-system sales market in 2007. In February 2007, Southwest Power Pool established an Energy Imbalance Services (EIS) market in which Empire has been able to participate. Participation in the EIS market has allowed Empire to increase its off-system sales over previous years. Empire acknowledged that fact in its 2007 Annual Report (SEC Form 10-K).[163] Furthermore, Empire will likely continue to

---

[158] Kind Rebuttal, Ex. 303, Page 5, Lines 1-5.

[159] Staff Report, Cost of Service, Ex. 204, Page 32.

[160] Transcript, Page 154, Lines 1-10.

[161] Kind Rebuttal, Ex. 303, Page 3, Lines 5-7.

[162] Kind True-Up Rebuttal Testimony, Ex. 317, Page 2, Lines 14-16.

[163] Kind Rebuttal, Ex. 303, Page 3, Lines 5-22.

participate in the Southwest Power Pool EIS market in future years.[164]

Empire's increased off-system sales margins in 2007 can also be attributed in part to the existence of a large bilateral sale of capacity and energy to the Kansas City Board of Public Utilities. That contract contributed approximately $1.8 million to Empire's off-system sales revenue.[165] Empire's contract with the Board of Public Utilities will expire in September 2008,[166] but Empire will likely continue to have capacity available to sell, there is a good market for that capacity in the Southwest Power Pool region, and the price at which such capacity can be sold in future years has been increasing.[167]

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Based on the agreement of the parties, the Commission finds it appropriate to include off-systems sales as a component of Empire's fuel adjustment clause. The level of off-system sales revenue margin Empire has been able to earn has fluctuated a great deal over the past five years. Ordinarily that would be a good argument for using a five-year average to set a base for expected off-system sales revenue margin. However, in this case, the Commission is persuaded that Empire's prospects for future off-system sales fundamentally changed when Southwest Power Pool began to offer an EIS market in February 2007. As a result, the off-system sales margin Empire was able to earn in the twelve months following the institution of that market is the best indicator of the margins it

---

[164] Transcript, Page 157, Lines 17-19.

[165] Kind Rebuttal, Ex. 303, Page 3, Lines 22-24.

[166] Keith Surrebuttal, Ex. 4, Page 8, Lines 13-14.

[167] Transcript, Page 198, Lines 8-17.

will likely be able to earn in the coming years. Consequently, the Commission will order Empire to use $6,116,915 as the base for its anticipated off-system sales margin, for inclusion in the company's fuel adjustment clause.

4. Depreciation

Discussion:

Depreciation is the means by which a utility is able to recover the cost of its investment in its rate base by recognizing the reduction in value of that property over the estimated useful life of the property. Empire's current depreciation rates were established by the Commission in Empire's last rate case, Case Number ER-2006-0315.[168]

Empire proposes to modify certain of its current depreciation rates and offered a depreciation study prepared by Donald Roff, President of Depreciation Specialty Resources, to justify those changes. Roff indicates there are two primary elements that account for the increase in annual depreciation expense indicated by his study. The first element is longer lives, which has the effect of decreasing annual depreciation expense. The second is the effect of negative net salvage, which tends to increase annual depreciation expense.[169] The changes proposed by Roff would increase Empire's annual depreciation expense by about $1.38 million.[170]

Staff argues it would be inappropriate and unnecessary to allow Empire to modify its depreciation rates while the company is operating under the experimental regulatory plan approved in Case Number EO-2005-0263. Both Staff and Public Counsel contend the study offered by Roff is flawed by the use of bad data provided by Empire. Staff and Public

---

[168] Schad Rebuttal, Ex. 217, Page 11, Lines 11-14.

[169] Roff Direct, Ex. 25, Pages 2-3, Lines 26-28, 1-2.

[170] Roff Direct, Ex. 25, Page 2, Lines 21-23.

Counsel further contend Roff used inappropriate methodologies in preparing his depreciation study. Both urge the Commission to leave current depreciation rates in place.

Findings of Fact:

In Case Number EO-2005-0263, the Commission approved a stipulation and agreement that implemented an experimental regulatory plan designed to ease Empire's participation in construction of the latan 2 generation plant. The approved stipulation and agreement includes a provision allowing Empire to recover an additional regulatory plan amortization (RPA) in this and other general rate cases, to support the company's cash flows to ensure its financial ratios continue to support an investment grade rating on its debt.[171]

If Empire is shown to have a deficiency in its cash flow under current customer rates, then the Stipulation and Agreement from Case No. EO-2005-0263 provides for recovery in rates of a regulatory plan amortization sufficient to restore Empire's cash flows to levels supportive of an investment grade credit rating. Under these circumstances, if the Commission were to grant Empire an increase in its depreciation rates, then such an increase would directly increase Empire's cash flow and reduce the amount of regulatory plan amortization Empire would otherwise require to maintain its current investment grade credit ratings.[172] In other words, every additional dollar Empire received through increased depreciation rates would decrease its regulatory plan amortization amount by a dollar.

---

[171] *In the Matter of The Empire District Electric Company's Application for Approval of an Experimental Regulatory Plan Related to Generation Plant*, Case No. EO-2005-0263, August 2, 2005, Order Approving Stipulation and Agreement, Attachment 1, Paragraph 2.

[172] Oligschlaeger Surrebuttal, Ex. 202, Page 17, Lines 3-22.

In its last rate case, Empire received a regulatory plan amortization of $10,168,615.[173] As explained in the true-up direct testimony of Mark Oligschlaeger, the amount of that amortization may be reduced somewhat in this case, but the amortization will not go away entirely. Consequently, the Commission's decision on depreciation will have no impact on the rates Empire will be allowed to charge its customers because of this case. Furthermore, since depreciation expense and regulatory plan amortization amounts are booked to the depreciation reserve, the Commission's decision on depreciation rates in this case will have no impact on the company's future rate base amounts either.

Since the Commission's decision on the depreciation issues raised by Empire's depreciation study will not affect the rates that result from this order, there is little need to implement the changes suggested by that study at this time. Furthermore, Staff and Public Counsel have raised significant doubts about the validity of Empire's depreciation study.

The historical salvage/cost of removal data supplied by Empire to Staff did not have any entries coded as reimbursements, and more specifically, did not have any indication the company had received insurance proceeds, third-party reimbursements or any other type of reimbursement.[174] That omission means Staff was unable to make a determination of what amounts of reimbursement were received by Empire and could not evaluate the appropriateness of including reimbursements in the depreciation rate calculations.[175] Furthermore, discrepancies in retirement dollar information between the historical salvage/cost of removal data kept by Empire compared to the historical mortality data maintained by Empire raised questions regarding whether the company's maintenance of

[173] Oligschlaeger True-Up Direct, Ex. 233, Page 11, Lines 21-22.

[174] Schad Rebuttal, Ex. 217, Page 6, Lines 14-19.

[175] Schad Rebuttal, Ex. 217, Pages 6-7, Lines 22-23, 1-2.

mortality records of property and property retirements complies with the requirements of Commission Rule 4 CSR 240-20.030.[176]

At the hearing, Empire's witness, Donald Roff, conceded that the data provided by Empire to Staff apparently did not include data about reimbursements, but alleged the data Empire supplied to him did include the reimbursement information.[177] He did not explain why he would have received different data than that supplied to Staff. Furthermore, Roff was unable to explain why historical cost of removal salvage and historical mortality data supplied by Empire did not match.[178]

As Roff conceded at the hearing, any depreciation study is only as good as the data that goes into it.[179] The data supplied by Empire and used by Roff to prepare his depreciation study was deficient. In fact, Staff found it so deficient it was unable to draw any conclusions from the depreciation study it attempted to complete for this case.[180]

Public Counsel also challenged aspects of Empire's depreciation study and agrees with Staff that the Commission should leave the company's current depreciation rates in place for purposes of this case. Public Counsel contends Empire's depreciation study inconsistently treated reserve deficiencies and reserve surpluses. Public Counsel asks the Commission to make a finding that for all accounts the reserve deficiency or reserve surplus in each account should be recovered over the remaining life of that account. That

---

[176] Schad Rebuttal, Ex. 217, Page 8, Lines 1-5.

[177] Transcript, Page 303, Lines 13-23.

[178] Transcript, Pages 305-307, Lines 20-25, 1-25, 1-2.

[179] Transcript, Page 302, Lines 3-9.

[180] Schad Rebuttal, Ex. 217, Pages 10-11, Lines 3-22, 1-2. *See also*, Transcript, Page 343, Lines 7-25.

proposed change from the Whole Life technique to use of a Remaining Life technique would be a change in established Commission depreciation policy.[181]

Conclusions of Law:

Commission Rule 240-20.030 requires Empire to keeps its accounts in conformity with the Uniform System of Accounts.

Decision:

Given the unreliability of the data supplied by Empire and used in the preparation of its depreciation study, the Commission will decline to make any changes to Empire's existing depreciation rates in this case. Furthermore, because of the application of the regulatory plan amortization, this decision will have no impact on the rates that will result from this case. Since the Commission is rejecting the depreciation study offered by Empire and depreciation rates will remain unchanged, the Commission will not revise its existing policy to substitute the Remaining Life technique for the Whole Life technique advocated by Public Counsel.

5. Inclusion of Asbury SCR in Rate Base

Findings of Fact:

In 2007, Empire undertook a project to install Selective Catalytic Reduction (SCR) equipment at its Asbury coal-fired power plant. Installation of the SCR equipment at the Asbury plant was needed to allow Empire to meet the requirements of the Clean Air Interstate Rule implemented by the federal Environmental Protection Agency in 2005.[182] Empire planned to install the SCR equipment as part of a scheduled major outage of the

---

[181] Schad Rebuttal, Ex. 217, Pages 11-12, Lines 18-23, 1-16.

[182] Mertens Direct, Exhibit 5, Page 6, Lines 4-18.

Asbury plant and expected the installation to be completed during the fourth quarter of 2007.[183]

The planned installation of SCR equipment at the Asbury plant was addressed in Empire's experimental regulatory plan, which the Commission approved in Case No. EO-2005-0263. That plan established specific in-service criteria that would have to be met before the cost of the equipment would be included in Empire's rate base.[184] As a part of those in-service criteria, the equipment had to be able to demonstrate its efficiency while the generating unit was operated over a continuous 120-hour period.[185]

Empire completed the SCR construction in November 2007 during the scheduled outage of the Asbury plant. Unfortunately, during the outage, Empire determined that the generator for Asbury Unit 1 unexpectedly needed to be rewound, a circumstance unrelated to the installation of the SCR equipment. The rewind pushed the Asbury outage completion date back to February 10, 2008. Since the Asbury Unit could not be run until the outage was complete, performance testing and other in-service criteria for the SCR installation could not be completed until February 29, 2008.[186] The SCR installation met all in-service criteria by that date, and it is currently in use in the provision of electric service to Empire's customers.[187]

Staff initially refused to include the cost of the SCR installation in Empire's rate case because it was not in service as of December 31, 2007, the end of the test-year update

---

[183] Mertens Direct, Exhibit 5, Page 6, Lines 18-20.

[184] Mertins Direct, Exhibit 5, Page 7, Lines 3-11.

[185] Mertins Direct, Exhibit 5, Page 8, Lines 1-3.

[186] Mertins Rebuttal, Ex. 6, Pages 3-4, Lines 21-23, 1-5.

[187] Transcript, Page 102, Lines 11-20.

period for inclusion of known and measurable costs.[188] However, Staff indicated that if the Commission were inclined to include the SCR installation project in Empire's rate base, it should do so as part of a general true-up rather than as an isolated adjustment. Staff indicated a true-up would ensure all of Empire's revenue, expense, rate base, and rate of return revenue requirement components would be matched and measured consistently with the Asbury SCR addition.[189]

On May 13, 2008, the Commission ordered the true-up suggested by Staff and scheduled a true-up hearing for June 19 and 20. Following completion of its true-up audit, Staff included the Asbury SCR addition in its calculation of Empire's revenue requirement and no longer opposes the inclusion of this plant addition in rates.[190] No other party opposes the inclusion of the Asbury SCR addition in rates.

Conclusions of Law:

There are no additional conclusions of law for this issue.

Decision:

Given the agreement of the parties, the Commission finds that Empire's Asbury SCR addition shall be included in Empire's revenue requirement in the manner set forth by Staff in its true-up audit and testimony.

6. Other Issues Related to the Inclusion of Asbury SCR in Rate Base

Findings of Fact:

Several other issues related to the Asbury SCR addition are also resolved by the inclusion of that project in Empire's revenue requirement. Specifically, in its true-up audit

[188] Oligschlaeger Direct, Ex. 200, Pages 13-14, Lines 21-23, 1-2.

[189] Oligschlaeger Rebuttal, Ex. 201, Page 6, Lines 16-21.

[190] Oligschlaeger True-Up Direct, Ex. 233, Page 3, Lines 18-21.

Staff agreed that $1,152,712 in Missouri jurisdictional operating and maintenance expenses associated with the Asbury SCR equipment should be included in Empire's cost of service.[191] Staff also agreed to include an annualized level of depreciation associated with this plant addition in Empire's cost of service.[192] No party has opposed either adjustment.

Empire originally proposed to include 2008 property taxes associated with the Asbury SCR equipment for 2008 as an expense in its cost of service. Subsequently, Empire agreed those taxes would be capitalized as part of the SCR equipment addition and should not be recovered as an expense.[193] Consequently, the Commission no longer needs to resolve the 2008 SCR property tax issue.

Conclusions of Law:

There are no additional conclusions of law for these issues.

Decision:

Given the agreement of the parties, the adjustments set forth by Staff in its true-up audit and testimony shall be made.

7. Tracker for Cost of Compliance with Commission Rules on Vegetation Management and Infrastructure Inspections

Discussion:

In 2008, the Commission promulgated new rules designed to compel Missouri's electric utilities to do a better job of maintaining their electric distribution facilities to enhance the reliability of electric service to customers. Those rules, entitled Electrical

[191] Oligschlaeger True-Up Direct, Ex. 233, Pages 3-4, Lines 23, 1-2. See Also True-Up Direct Accounting Schedule, Ex. 234, Accounting Schedule 10, Adjustment S-28.6.

[192] Oligschlaeger True-Up Direct, Ex. 233, Page 3, Lines 21-22.

[193] Transcript, Page 78, Lines 7-21.

Corporation Infrastructure Standards[194] and Electrical Corporation Vegetation Management Standards and Reporting Requirements,[195] became effective on June 30, 2008.

To deal with the cost of complying with the new rules, Empire proposes an annual expenditure target be set at $9.9 million on a total company basis, which equals $8.9 million on a Missouri jurisdictional basis. That would include $6.1 million for on-going tree trimming, plus $2.8 million for compliance with the new rules. If Missouri jurisdictional expenditures did not reach $8.9 million, then in the following year Empire would be required to spend $8.9 million, plus the shortfall from the previous year, including interest at the company's short-term interest rate.[196] In addition, Empire asks that if it spends more than the $8.9 million target, it be allowed to record those costs as a regulatory asset until it can be considered for recovery, without interest, in its next rate case, which is scheduled to be filed in late 2009.[197]

Staff also suggests the Commission implement a tracker mechanism to allow Empire to recover the cost of complying with these rules. Under Staff's proposal, Empire would be required to spend a total of $8.575 million in Missouri for tree-trimming and infrastructure inspection activities.[198] Again, if Empire did not spend the required amount in the first year it would be required to spend the shortfall in the next year, plus interest. Staff would not allow for deferral of any amounts Empire spent in excess of the target.[199]

---

[194] Commission Rule 4 CSR 240-23.020.

[195] Commission Rule 4 CSR 240-23.030.

[196] Keith Surrebuttal, Ex. 4, Page 13, Lines 9-18.

[197] Keith Surrebuttal, Ex. 4, Pages 13-14, Lines 22, 1-6.

[198] Transcript, Page 415, Lines 18-19.

[199] Oligschlaeger Surrebuttal, Ex. 202, Page 23, Lines 5-12.

The difference in the amount of Staff's target proposal from that proposed by Empire is attributed to a difference in the number of years Staff and Empire propose to average in determining the company's cost of complying with the new rules. Empire estimated its cost of compliance for the first year as $2.4 million. For the second year, it estimated its cost of compliance as $2.75 million, with a still higher cost of compliance in the third year. Staff would allow Empire to recover the average cost of compliance for the first two years on the theory that the rates resulting from this case will likely remain in effect for only two years. Empire included the higher cost of compliance in the third year in its average, resulting in a higher average.[200]

Public Counsel opposes the use of a tracker mechanism to allow Empire to recover its future costs of complying with the Commission's new rules. Public Counsel contends those costs fall outside the test-year period and are not yet known and measurable. Therefore they should not be included in rates. Public Counsel also objects to the proposed tracker's requirement that Empire spend a preset amount of money each year, contending that requirement could encourage Empire to waste ratepayer money just to meet the spending requirement.

Findings of Fact:

The Commission implemented its new rules establishing infrastructure and vegetation management standards to address concerns about the reliability of electric service, particularly after summer thunderstorms and winter ice storms. The rules establish specific standards requiring electric utilities, including Empire, to inspect and replace old and damaged infrastructure, such as poles and transformers. In addition, electric utilities

---

[200] Transcript, Pages 415-416, Lines 22-25, 1-18.

are required to more aggressively trim tree branches and other vegetation that encroaches on transmission lines. In promulgating the stricter standards, the Commission anticipated utilities would have to spend more money to comply.

Empire estimates it will ultimately spend an additional $4-6 million per year to comply with the new rules.[201] Staff testified that the company's cost estimates are reasonable.[202] To comply with the new rules, Empire has implemented a more aggressive tree-trimming program involving more clearance and more attempts at tree removal.[203] Most significantly, Empire has been required to move from a ten-year tree-trimming cycle to a six year cycle in rural areas and four years in urban areas.[204]

However, Empire acknowledges some uncertainty about the prices it will face as it renegotiates the contracts to perform the extra required work.[205] Empire began actually experiencing additional costs to comply with the new rules at the end of 2007 when it hired a consultant to examine its tree-trimming and infrastructure replacement practices.[206] It anticipated beginning to incur on-going costs, with additional personnel in place, in June 2008.[207]

It is very important for Empire, as well as Missouri's other electric utilities, to improve the reliability of the service it offers its customers. For Empire to take immediate action to increase the scope of its tree-trimming activities would be in the public interest and it should

---

[201] Keith Rebuttal, Ex. 3, Page 11, Lines 13-18.

[202] Oligschlaeger Rebuttal, Ex. 201, Page 9, Lines 12-15.

[203] Transcript, Page 371, Lines 12-14.

[204] Transcript, Page 385, Lines 11-13.

[205] Transcript, Page 375, Lines 16-25.

[206] Transcript, Page 377, Lines 14-25.

[207] Transcript, Page 380, Lines 18-23.

be provided the financial resources needed to accomplish that goal in this rate case.[208] The rates implemented in this case are expected to remain in effect until June 2010, approximately 21 months.[209]

Conclusions of Law:

Commission Rule 4 CSR 240-23.020 establishes standards requiring electrical corporations, including Empire, to inspect its transmission and distribution facilities as necessary to provide safe and adequate service to its customers. Specifically, 4 CSR 240-23.020(3)(A) establishes a four-year cycle for inspection of urban infrastructure and a six-year cycle for inspection of rural infrastructure.

Commission Rule 4 CSR 240-23.020(4) establishes a procedure by which an electric utility may recover expenses it incurs because of the rule. Specifically, that section states as follows:

> In the event an electrical corporation incurs expenses as a result of this rule in excess of the costs included in current rates, the corporation may submit a request to the commission for accounting authorization to defer recognition and possible recovery of these excess expenses until the effective date of rates resulting from its next general rate case, filed after the effective date of this rule, using a tracking mechanism to record the difference between the actually incurred expenses as a result of this rule and the amount included in the corporation's rates ... .

This provision means Empire could ask the Commission for authority to accumulate and recover its cost of compliance in its next rate case, which it intends to file in 2009.

Commission Rule 4 CSR 240-23.030 establishes standards requiring electrical corporations, including Empire, to trim trees and otherwise manage the growth of vegetation around its transmission and distribution facilities as necessary to provide safe

---

[208] Oligschlaeger Surrebuttal, Ex. 202, Pages 23-24, Lines 22, 1-2.

[209] Keith Direct, Ex. 2, Page 15, Lines 1-3.

and adequate service to its customers. Specifically, 4 CSR 240-23.030(9) establishes a four-year cycle for vegetation management of urban infrastructure and a six-year cycle for vegetation management of rural infrastructure. The vegetation management rule also includes a provision that would allow Empire to ask the Commission for authority to accumulate and recover its cost of compliance in its next rate case.[210]

Decision:

Empire's cost to manage vegetation and inspect infrastructure is a legitimate cost of providing reliable service to its customers. No party disputes that Empire should be allowed to recover those costs in its rates. In the typical rate case, the amount of costs the Commission will allow in rates is determined by examining the costs the company has incurred in the past and projecting those costs into the future. However, in this case, it is certain that Empire's costs in this area will increase due to the additional requirements imposed by the Commission's new infrastructure and vegetation management rules. Hiring additional crews to inspect transmission lines and trim trees more frequently will cost more money. Moreover, Public Counsel participated in the proceeding in which the Commission promulgated its new rules and never challenged Empire's assertion that its costs would increase.[211] No one really disputes Empire's claim that its costs will increase due to the new rules.

Public Counsel, however, argues that no one can know at this time how much Empire will need to spend to comply with the new rules and thus Empire's increased costs of compliance are not currently known and measurable. Public Counsel contends that instead of including these speculative costs in Empire's rates in this case, the Commission

---

[210] Commission Rule 4 CSR 240-23.030(10).

[211] *Order of Rulemaking*, Mo. Reg. Vol. 33, No. 9, Pages 930-931 (May 1, 2008).

should use the provisions of the rules to allow Empire to defer its increased costs for recovery in its next rate case, when those costs will be known and measurable.

As Public Counsel indicates, no one can know with any certainty how much Empire will spend to comply with the requirements of the Commission's new infrastructure inspection and vegetation management rules. However, rather than compelling rejection of the tracker proposed by Staff and Empire, that fact supports the need for a tracker.

By one means or another, Empire will be able to recover its cost of complying with the rules. If its estimated costs are included in the rates established in this case, Empire will have a stronger incentive to spend the money it needs to spend now to fully comply with the rules. If the company were instead forced to wait until its next rate case to recover the money it spends to comply with the rules, its interest in managing its cash flow would give it an incentive to spend only what it absolutely must to meet the requirements of the rule. As Staff points out, the Commission wants to encourage Empire to take the steps, and spend the money needed, to quickly improve the reliability of its electric service. Furthermore, by including an estimate of Empire's likely cost of compliance in the rates established in this case, the customers who will immediately benefit from the improved reliability will pay the costs required to bring about that improvement, thus improving the match between cost causation and payment for those costs. For both reasons, it is appropriate to allow Empire to recover its anticipated costs of compliance in this case.

However, because those costs are not fully known, it is also appropriate to implement a tracking mechanism to ensure Empire spends the allotted money as intended. The question remains as to how that tracker should be structured.

Staff's proposed tracker simply requires Empire to spend $8.575 million per year in Missouri for tree-trimming and infrastructure inspection activities. If Empire did not spend the required amount in the first year, it would be required to make up the shortfall in the next year, plus interest. Staff's proposed tracker would simply require Empire to track its expenditures to ensure that the money was spent on the desired activities. If Empire spent more than $8.575 million, it would not be allowed to defer those extra expenditures for possible recovery in a future rate case.

Empire's proposed tracker would require the company to spend $8.9 million in Missouri for tree-trimming and infrastructure inspection activities. Again, if Empire did not spend the required amount in the first year, it would be required to make up the shortfall, plus interest the next year. Empire's proposal differs from Staff's in that Empire proposes it be allowed to track expenditures it makes beyond the $8.9 million it is required to make for possible recovery in its next rate case.

Public Counsel criticized both proposed trackers because they could have the perverse effect of requiring Empire to spend money beyond what it would prudently need to spend to meet the requirements of the rule. Public Counsel's criticism is well founded. If, for example, Empire can fully meet the requirements of the rule while spending only $7 million, it should not be required to spend more ratepayer money simply to meet the requirements of the tracker. The Commission wants to encourage Empire to spend the money it needs to spend to improve the reliability of its service, but there is no need to require the company to waste money.

Public Counsel's concern can be addressed simply by creating a true tracker that creates a regulatory liability in any year where Empire spends less than the target amount,

and a regulatory asset where the company spends more than the target amount. The assets and liabilities would then be netted against each other and considered in Empire's next rate case. Empire's current pension and OPEB trackers work this same way.[212]

Staff opposes implementation of a two-way tracker because it wants to require Empire to spend a set amount of money to quickly comply with the requirements of the new rules and thereby improve the reliability of its service. However, it does not want to allow Empire to defer for future recovery any amount it spends above that amount. The actual amount that Empire should prudently spend to meet the requirements of the new rules is simply not certain enough to justify such precision. It is possible that Empire will need to spend more than the target amount to meet the rules requirements and Staff's proposal would give the company a strong disincentive to spend the needed money. It is more reasonable to establish a two-way tracker that will eliminate the need for a precise advance determination of the amount of costs Empire should be allowed to recover.

The question remains of where to set the target base amount to be included in rates and around which the tracker will measure variations. Empire's Missouri jurisdictional spending amount of $8.9 million is based on a three-year average of costs that Empire anticipates will rise from year to year. Staff's target of $8.575 million is based on a two-year average of anticipated costs. Since it appears that Empire will file a new rate case within two years, Staff's use of a two-year average is more reasonable.

The Commission will require Empire to implement a two-way tracker for measuring costs relating to infrastructure inspection and vegetation management. The tracker shall create a regulatory liability in any year where Empire spends less than the target amount,

---

[212] Transcript, Page 403, 10-18.

and a regulatory asset where the company spends more than the target amount. The assets and liabilities shall then be netted against each other and considered in Empire's next rate case. The annual target amount shall be set at $8.575 million, and Empire shall be allowed to recover that amount in its current rates.

IT IS ORDERED THAT:

1. The Motion to Reject Specified Tariff Sheets and Strike Testimony filed by Praxair, Inc., Explorer Pipeline, Inc., and General Mills, Inc. on April 11, 2008, is denied.

2. The tariff sheets filed by The Empire District Electric Company on October 1, 2007, and assigned tariff number YE-2008-0205, are rejected.

3. The Empire District Electric Company is authorized to file a tariff sufficient to recover revenues as determined by the Commission in this order. Empire shall file its compliance tariff no later than August 9, 2008.

4. Any pending motions the Commission has not specifically ruled upon are denied.

5. This report and order shall become effective on August 9, 2008.

BY THE COMMISSION

(S E A L)

Colleen M. Dale
Secretary

Davis, Chm., Murray, and Jarrett, CC., concur;
and Clayton, Gunn, CC., dissent with opinions to follow;
and certify compliance with the provisions
Of Section 536.080, RSMo.

Dated at Jefferson City, Missouri,
on this 30th day of July, 2008.