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

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In the Matter of the Tariff Filings of Union Electric Company, d/b/a AmerenUE, to Increase Its Revenues for Retail Electric Service.

Case No. ER-2010-0036

Tariff Nos. YE-2010-0054 and YE-2010-0055

# INITIAL POST-HEARING BRIEF OF THE STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION

Nathan Williams Deputy Counsel Missouri Bar No. 35512

#### Sarah L. Kliethermes

Legal Counsel Missouri Bar No. 60024

#### **Eric Dearmont**

Assistant General Counsel Missouri Bar No. 60892

## Samuel D. Ritchie

Legal Counsel Missouri Bar No. 61167

#### Jaime N. Ott

Assistant General Counsel Missouri Bar No. 60949

Attorneys for the Staff of the Missouri Public Service Commission P. O. Box 360 Jefferson City, MO 65102

April 23, 2010

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"Cash is king." This phrase, uttered by Stephen Kidwell, Vice-President of Regulatory Affairs & Energy Efficiency for Union Electric Company d/b/a AmerenUE, during the Missouri Energy Efficiency Investment Act rulemaking workshop on Wednesday, April 14, 2010 (File No. EW-2010-0265) is an apt description of what underlies AmerenUE's positions in this rate case—get as much money as it can from retail customers as soon as possible. Some of AmerenUE's efforts do so in this case follow:

- Seeking interim rate relief on a non-emergency basis—the Commission has already rejected that request.
- Seeking to recover fuel-related costs that it would later recover 95% of through its fuel adjustment clause.
- Seeking to continue a vegetation management and infrastructure inspection tracker with a level set based on higher future year budget amounts.
- Seeking Commission adoption of AmerenUE's assumed retirement dates for its steam production and hydroelectric power plants, the first of which might occur in 2023, in determining depreciation expense.

- Seeking inclusion of the cost of nuclear fuel assemblies that will not be loaded into and used in its nuclear reactor until May 2010 (well after the January 31, 2010 true-up cutoff date) in determining AmerenUE's nuclear fuel cost.
- Seeking reliance on its abnormally high test year non-labor power plant maintenance expense for its coal-fired generating units rather than normalizing that expense.
- Seeking reliance on its abnormally high test year storm expense rather than normalizing it.
- Seeking demand-side cost recovery through a tracker based on 2010 through 2012 budgeted demand-side costs, even though AmerenUE did not spend in 2009 anywhere near the demand-side costs in its 2009 budget.
- Not considering phasing in the increase in its rates, although, by agreement, in Case No.
   EC-2002-1 a smaller decrease in its rates was phased in.

Union Electric Company d/b/a AmerenUE initiated this case by filing on July 24, 2009 tariff sheets AmerenUE designed to increase its gross electric revenues by approximately \$401.5 million annually, exclusive of applicable gross receipts, sales, franchise and occupational taxes or fees. AmerenUE stated that about \$227 million was attributable to anticipated increases in its normalized net fuel costs above those in its current base rates. Currently, AmerenUE has gross electric revenues from its retail customers of approximately \$2.2 billion annually, exclusive of applicable gross receipts, sales, franchise and occupational taxes or fees. During the course of this case immediately preceding and during the evidentiary hearing held March parties presented to the Commission several settlement agreements (nonunanimous stipulation and agreements), all but two of which were unopposed and approved by the Commission by orders dated March 24, 2010 (First Nonunanimous Stipulation and Agreement) and April 14, 2010

(Second Nonunanimous Stipulation and Agreement, Third Nonunanimous Stipulation and Agreement, and Market Energy Prices Nonunanimous Stipulation and Agreement). As a result of those settlements, the issues left for decision by the Commission have narrowed from those included in the list of issues Staff filed March 8, 2010.

Based on the settlements, changes in positions and actual information through the true-up cut-off date of January 31, 2010, AmerenUE is now seeking to increase its gross electric revenues by approximately \$287 million annually, exclusive of applicable gross receipts, sales, franchise and occupational taxes or fees. It is Staff's position that the increase should instead be about \$165 million annually. Based on Staff's analysis, approximately \$116 million of the Staff's \$165 million is due to increased net fuel costs and, due to the nuclear fuel issue worth about \$11 million, about \$127 million of AmerenUE's \$287 million is due to increased net fuel costs.

As is usually the case, one of the issues before the Commission where the parties differ most on the increase in electric revenues is return on equity. AmerenUE is seeking a 10.8% return on equity; Staff recommends a specific return on equity of 9.35% within a range of 9.00 to 9.70 percent (9.00-9.70%). Other issues in this case where the parties' differ most on the increase are depreciation, power plant maintenance expense and nuclear fuel expense. Rather using the order of the issues in the list of issues filed March 8, 2010, Staff has reordered them based on the dollar impact of the issue between it and AmerenUE on the electric revenues AmerenUE should have the opportunity to collect, followed by the remaining fuel adjustment clause, class cost of service and rate design issues. With each, Staff has included a reference back to the List of Issues and an approximate dollar difference on that issue between it and AmerenUE as to the gross electric revenues AmerenUE should have the opportunity to collect in rates as reflected in the revised true-up reconciliation Staff filed on April 14, 2010.

In considering the issues before it in this case, the Commission should keep in mind not only the testimony of the expert witnesses, but also the testimony the Commission heard directly from members of the public in the seventeen local public hearings the Commission held throughout AmerenUE's electric service territory. As the Commission stated in its February 10, 2020 Order Directing the Parties to Address the Concerns Raised by AmerenUE's Low-Income Residential Customers, many members of the public "testified that any rate increase would increase the already heavy financial burden on AmerenUE's low-income residential customers." The Commission also should not blind itself to the current state of the economy, of which, being a matter of general knowledge, it may take official notice.<sup>1</sup> It should also keep in mind that AmerenUE plans to file another general electric rate increase case before this Commission yet this year<sup>2</sup> and, despite its professed concern with the impact of its rate increase request on its customers, AmerenUE did not consider ameliorating that increase by phasing-in the increase, although it acknowledged such a phase-in "would give AmerenUE's retail customers an opportunity to adjust to the increase in their rates."<sup>3</sup>

Although no Commission decision in a rate case binds the Commission to use a particular methodology, or approach, in a case, what the Commission has said in its prior reports and orders may create a basis that can be used to challenge the Commission with being arbitrary and capricious.<sup>4</sup> Every issue before the Commission for decision in this case is one upon which reasonable minds may differ. That is why they are before the Commission. It is the

<sup>&</sup>lt;sup>1</sup> § 536.070(6), RSMo. 2000.

<sup>&</sup>lt;sup>2</sup> AmerenUE witness Baxter, Trans Vol. 22, pp. 915-16.

<sup>&</sup>lt;sup>3</sup> AmerenUE witness Baxter, Trans Vol. 22, pp. 870-872.

<sup>&</sup>lt;sup>4</sup> See e.g. State of Missouri ex rel. Aquila, Inc. v. Public Service Commission, No. WD70788, slip op. (Western District Mo. App. April 20, 2010).

Commission's role and duty to resolve those issues in a way that is reasonable and lawful.<sup>5</sup> In doing so the Commission has broad discretion.<sup>6</sup> Further, while the Commission may believe or disbelieve any witness, the Commission should recognize that if it impugns the credibility of a witness, the credibility of that witness in future cases is also affected; therefore, the Commission should not lightly find in this case that any witness is not credible.<sup>7</sup>

When preparing its Report and Order, the Commission should carefully consider not only the results it reaches, but also the rationale(s) it relies on for them.

With regard to the powers it is exercising in this case, the Commission should keep in mind that in 1913, in the first case where the Missouri Supreme Court addressed the Public Service Commission Act which first gave the Commission its existence and jurisdiction, the Court stated:

That act is an elaborate law bottomed on the police power. It evidences a public policy hammered out on the anvil of public discussion. It apparently recognizes certain generally accepted economic principles and conditions, to wit: That a public utility (like gas, water, car service, etc.) is in its nature a monopoly; that competition is inadequate to protect the public, and, if it exists, is likely to become an economic waste; that state regulation takes the place of and stands for competition; that such regulation, to command respect from patron or utility owner, must be in the name of the overlord, the state, and, to be effective, must possess the power of intelligent visitation and the plenary supervision of every business feature to be finally (however invisible) reflected in rates and quality of service. It recognizes that every expenditure, every dereliction, every share of stock, or bond, or note issued as surely is finally reflected in rates and quality of service to the public, as does the moisture which arises in the atmosphere finally descend in rain upon the just and unjust willy nilly.

That there had been a vast increase in such utilities in the last decade or two, and that evils have grown up crying out lustily for a cure by the lawmaker, is writ larger in current history. The act, then, is a highly remedial one filling a

<sup>&</sup>lt;sup>5</sup> § 386.510, RSMo. 2000.

<sup>&</sup>lt;sup>6</sup> State ex rel. Dyer v. Public Serv. Comm'n, 341 S.W.2d 795, 802 (Mo. 1960), cert. denied, 366 U.S. 924, 81 S.Ct. 1351 (1961).

<sup>&</sup>lt;sup>7</sup> "The determination of witness credibility is left to the Commission, " 'which is free to believe none, part, or all of the testimony.' "*Mo. Gas Energy*, 186 S.W.3d at 382 (quoting *Commerce Bank, N.A. v. Blasdel*, 141 S.W.3d 434, 456-57 n. 19 (Mo.App. W.D.2004))" *State ex rel. Public Counsel v. Public Service Commission*, 289 S.W.3d 240, 247 (Mo. App. 2009).

manifest want, is worthy a hopeful future, and on well-settled legal principles is to be liberally construed to further its life and purpose by advancing the benefits in view, and retarding the mischiefs struck at-all pro bono publico. Besides all which the lawmaker himself has prescribed, it "shall be liberally construed with a view to the public welfare, efficient facilities and substantial justice between patrons and public utilities." Section 127.<sup>8</sup>

Further, since this early case the Missouri Supreme Court has continued to recognize the broad

sweep of the Commission's authority and discretion, and that "many of its decisions necessarily rest

largely in the exercise of a sound judgment."<sup>9</sup> The Missouri Supreme Court sitting *en banc*, in *State* 

*ex rel. City of St. Louis v. Public Service Commission*<sup>10</sup> stated:

The whole purpose of the act is to protect the public. The public served by the utility is interested in the service rendered by the utility and the price charged therefore; [the] investing public is interested in the value and stability of the securities issued by the utility. In fact the act itself declares this to be the purpose. Section 5251, R. S. 1929 (Mo. St. Ann. § 5251, p. 6674), in part reads: "The provisions of this chapter shall be liberally construed with a view to the public welfare, efficient facilities and substantial justice between patrons and public utilities."<sup>11</sup> (Internal citation omitted.)

Similarly, the Missouri Court of Appeals, in De Paul Hospital School of Nursing, Inc. v.

Southwestern Bell Telephone Company<sup>12</sup> discussed the long-standing view of Missouri's courts that

the Public Service Commission Law is to be "liberally construed for the public's, ergo the

consumer's protection," stating:

(T)he Public Service Commission Law of our own state has been uniformly held and recognized by this court to be a remedial statute, which is bottomed on, and is referable to, the police power of the state, and under well-settled legal principles, as well as by reason of the precise language of the Public Service Commission Act itself, is to be 'liberally construed with a view to the public welfare, efficient facilities and substantial justice between patrons and public utilities." <u>State ex rel.</u> <u>Laundry, Inc. v. Public Service Commission</u>, 327 Mo. 93, 34 S.W.2d 37, 42-3(2, 3) (Mo. 1931). 'In its broadest aspects, the general purpose of such regulatory

 <sup>&</sup>lt;sup>8</sup> State on inf. Barker ex rel. Kansas City v. Kansas City Gas Co., 254 Mo. 515, 163 S.W. 854, 857-858 (1913).
 <sup>9</sup> State ex rel. Dyer v. Public Serv. Comm'n, 341 S.W.2d 795, 802 (Mo. 1960), cert. denied, 366 U.S. 924, 81 S.Ct. 1351 (1961).

<sup>&</sup>lt;sup>10</sup> 335 Mo. 448, 73 S.W.2d 393 (banc 1934),

<sup>&</sup>lt;sup>11</sup> Id. at 399.

<sup>&</sup>lt;sup>12</sup> 539 S.W.2d 542 (Mo. App. 1976).

legislation is to substitute regulated monopoly for destructive competition. But the dominant thought and purpose of the policy is the protection of the public while the protection given the utility is merely incidental. <u>State ex rel. Electric</u> <u>Company of Missouri v. Atkinson, et al.</u>, 275 Mo. 325, 204 S.W. 897; <u>State ex</u> <u>rel. Pitcairn v. Public Service Commission</u>, 232 Mo.App. 535, 111 S.W.2d 222.' State ex rel. Crown Coach Company v. Public Service Commission, 238 Mo. App. 287, 179 S.W.2d 123, 126 (5, 6) (1944).<sup>13</sup> (Emphasis added.)

#### **RATE OF RETURN** (List of Issues No. 2; ~\$72 million)

Staff recommends the Commission authorize an overall rate of return for AmerenUE in the range of 7.39 percent to 7.72 percent (7.39-7.72%). This overall rate of return recommendation is based upon Staff's recommended return on common equity range of 9.00 percent to 9.70 percent (9.00-9.70%). Staff and AmerenUE agree that the updated capital structure of AmerenUE consisting of 47.390% long-term debt, 0% short-term debt, 1.484% preferred stock and 51.126% common equity is appropriate to apply in setting rates in this case. Staff's return on equity recommendation in this case is driven primarily by the results of a multistage discounted cash flow analysis, upon which Staff elected to rely in order to more accurately capture investor expectations related the current building cycle in the electric utility industry. Staff's recommended return on equity range and return on equity point estimate of 9.35 percent (9.35%) are supported by independent, corroborating factual evidence obtained from practitioners in the financial community. This corroborating evidence, in conjunction with Staff's application of sound financial theory, demonstrates the reasonableness of Staff's recommendation.

#### **Introduction**

Determining an appropriate rate of return is a difficult task. In addition to being one of the most technically complex issues involved in a general rate case, such inherent complexity is magnified by the significant financial impact associated with the resolution of the issue.

<sup>&</sup>lt;sup>13</sup> *Id.* at 548.

Although in authorizing an appropriate rate of return the Commission must examine the cost of both the debt and equity components that comprise a utility's capital structure, it is the cost of equity that generally predominates in intricacy (and contention) over the other factors. As was stated by the Commission in AmerenUE's last electric rate proceeding, Case No. ER-2008-0318, "[d]etermining an appropriate return on equity is without a doubt the most difficult part of determining a rate of return."<sup>14</sup> Because in reaching this determination the Commission must consider the expectations of equity investors, "...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."<sup>15</sup>

The Commission is guided in this mission however by the testimony of expert witnesses and the factual evidence on which such expert testimony is based. In this case six such witnesses have provided their expert opinions on the topic of rate of return, both in the form of pre-filed and live testimony. Specifically, these witnesses include Mr. David Murray and Mr. Stephen Hill, who present the position of the Staff of the Commission, Dr. Roger A. Morin and Ms. Julie Cannell, who testify on behalf of AmerenUE, Mr. Michael Gorman, who presents his perspective on behalf of the Missouri Industrial Energy Consumers ("MIEC")<sup>16</sup>, and finally, Mr. Daniel Lawton, who testifies on behalf of the Office of the Public Counsel. Although these experts present a spectrum of recommendations for the Commission's consideration, Staff believes that the Commission is well-served by the presentation of these diverse perspectives and that continued academic debate on the issues intrinsic to rate of return will render more consistent results in the future.

<sup>&</sup>lt;sup>14</sup> In the Matter of Union Electric Company, d/b/a AmerenUE's Tariffs to Increase its Annual Revenues for Electric Service, Case No. ER-2008-0318 (Report and Order, p.15, January 27, 2009).

<sup>&</sup>lt;sup>15</sup> Id.

<sup>&</sup>lt;sup>16</sup> Ex. 408 MIEC witness Gorman Direct, p. 1.

Although Staff believes the other experts in this case are both knowledgeable and well qualified, Staff cannot, and does not, agree with their overstated return recommendations. To the contrary, Staff firmly believes the Commission should authorize an overall rate of return for AmerenUE that falls in the range of 7.39 percent to 7.72 percent (7.39-7.72%),<sup>17</sup> based upon Staff's recommended return on common equity range of 9.00 percent to 9.70 percent (9.00-9.70%) and/or Staff's return on equity point estimate of 9.35 percent (9.35%).<sup>18</sup> Staff's recommendation in this case is driven primarily by the results of a multi-stage discounted cash flow ("DCF") analysis and is supported by independent, corroborating factual evidence obtained from practitioners in the financial community. Staff believes that this corroborating evidence, in conjunction with Staff's application of sound financial theory, demonstrates the reasonableness of Staff's recommendation.

#### What are "Rate of Return" and "Return on Equity"?

The generic formula used in regulation to determine a utility's revenue requirement is represented by the following equation:

 $\mathbf{RR} = \mathbf{C} + (\mathbf{V} \cdot \mathbf{D})\mathbf{R}$ 

where:

RR = Revenue Requirement C = Prudent Operating Expenses V = Gross Value of Utility Plant in Service D = Accumulated Depreciation R = Rate of Return

As is evident, in attempting to establish a rate of return regulators are attempting to determine in isolation the "R" component in the above equation. Expressed algebraically, this rate of return, "R", is expressed as follows:

<sup>&</sup>lt;sup>17</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 4, ll. 3-5.

<sup>&</sup>lt;sup>18</sup> *Id.* at ll. 5-8.

$$R = (i)(L) + (d)(P) + (k)(E)$$

where:

i = Embedded Cost of Debt
L = Proportion of Debt in the Capital Structure
d = Embedded Cost of Preferred Stock
P = Proportion of Preferred Stock in the Capital Structure
k = Required Return on Common Equity (ROE)
E = Proportion of Common Equity in the Capital Structure

The required on common equity, "k", is the component of the overall rate of return, "R", that is intended to provide a return on the proportion of common equity included in AmerenUE's capital structure. As Staff witness Stephen Hill notes in his Rebuttal Testimony, the required return on common equity is also, effectively, the rate of profit the utility firm is allowed to earn.<sup>19</sup> A verbal description of the process used to determine rate of return is further provided as follows:

A weighted cost for each capital component is determined by multiplying each capital component ratio by the appropriate embedded cost (in the case of debt) or by the estimated cost of common equity component (in the case of common equity). The individual weighted costs are then summed to arrive at a total weighted cost of capital. This total weighted average cost of capital (WACC) is synonymous with the fair rate of return for the utility company...A company's authorized WACC is considered a just and reasonable rate under normal circumstances....Assuming that the various forms of capital are reasonably balanced and are valued correctly, the resulting WACC, when applied to rate base, will provide the funds necessary to service the various forms of capital.<sup>20</sup>

Incorporating these equations and descriptions, Staff's recommended rate of return<sup>21</sup> is

depicted by the following chart:

<sup>&</sup>lt;sup>19</sup> See Ex. 212 Staff witness Hill Rebuttal, p. 5.

<sup>&</sup>lt;sup>20</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 17, ll. 32-33 to p. 18, ll. 1-11.

<sup>&</sup>lt;sup>21</sup> Based upon the test year capital structure and Staff's point estimate return on equity recommendation.

<b>Capital Component</b>	Percentage of Capital	Cost	Weighted Cost
Common Stock	47.39%	9.35% (ROE)	4.43%
Preferred Stock	1.60%	5.189%	0.08%
Long-Term Debt	51.01%	5.967%	3.04%
			7.72% (ROR)

Staff firmly believes that, for the reasons provided in Staff's testimony and further explained in this brief, Staff's recommendation is the most accurate estimate of the current cost of equity capital for AmerenUE and, therefore, the most reasonable recommendation for the allowed return on equity presented in this case.

#### Legal Principles Guiding Rate of Return Determinations

#### A. Hope and Bluefield

Although the debate surrounding cost of capital generally involves disputes as to the techniques employed in the practice of regulatory finance, these techniques and practices must operate within the legal guidelines established in the United States Constitution and interpreted by the United States Supreme Court in such well-know cases as *Bluefield Waterworks and Improvement Company v. Public Service Commission of West Virginia*<sup>22</sup> and *Federal Power Commission v. Hope Natural Gas Company*<sup>23</sup>. In *Bluefield*, the United States Supreme Court specifically stated that:

[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

<sup>&</sup>lt;sup>22</sup> 262 U.S. 679 (1923).

<sup>&</sup>lt;sup>23</sup> 320 U.S. 591 (1943).

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.<sup>24</sup>

Twenty years later, the Court in *Hope* added the following:

... 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.<sup>25</sup>

#### **B**. The "Zone Of Reasonableness"

In the past, the Commission has applied a technique whereby the return on equity estimates of the expert witness are evaluated in reference to the national average of recent return on equity awards in other rate proceedings in order to evaluate the reasonableness of such expert recommendations. More specifically, the Commission established "zone of reasonableness" is a range of one-hundred (100) basis points above and one-hundred (100) basis points below the national average of these allowed returns. Although the Commission generally has not used the zone of reasonableness as "an absolute rule precluding consideration of recommendations falling outside of that zone," the commission has viewed recommendations substantially outside of that zone "with skepticism."<sup>26</sup>

 <sup>&</sup>lt;sup>24</sup> Bluefield Waterworks & Improv. Co. v. Pub. Serv. Comm'n of West Virginia, 262 U.S. 679, 692-693 (1923).
 <sup>25</sup> Fed. Power Comm'n v. Hope Nat. Gas Co., 320 U.S. 591, 603 (1943) (internal citations omitted).

<sup>&</sup>lt;sup>26</sup> In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area (Report and Order, p. 39, May 22, 2007).

The national average of return on equity awards for electric utilities, as reported by the Regulatory Research Associates, was 10.43 percent (10.43%) for the first nine months of 2009.<sup>27</sup> Staff also points out that the average amount of equity as a percentage of the capital structures litigated during this period was 47.94 percent (47.94%).<sup>28</sup> Staff acknowledges that its point recommendation of 9.35 percent (9.35%) is more than one-hundred (100) basis points below the national average of return on equity awards authorized by other state commissions during the first nine months of 2009.

However, it is Staff's position that this fact, in isolation, does not render Staff's point recommendation unreasonable, nor does it conclusively establish that Staff's point recommendation does not provide the most accurate and reliable estimate of the cost of AmerenUE's equity capital. This is not to say that knowledge of national averages is not relevant to the Commission's decision or that such information is not a useful check when the Commission is exercising its discretion in establishing an authorized return for AmerenUE in this case. However, a simple national average based on other cases from other jurisdictions does not, and should not, control the value or ultimate consideration of an expert's opinion on the appropriate return on equity for use in Missouri. In fact, when questioned on the technical relevance of the zone of reasonableness during the evidentiary hearing in this case, no expert indicated that they would change their recommendation in order to fall mechanically within a two-hundred (200) basis point buffer. Why not? In words of Dr. Morin, "because the data is the data."29

<sup>&</sup>lt;sup>27</sup> See Ex. 232 Supplement to Appendix 2 of Staff Revenue Requirement Cost of Service Report, Schedule 21-3.

<sup>&</sup>lt;sup>28</sup> Id. This common equity ratio is far below the current common equity ratio of AmerenUE. This distinction and its potential effect on the cost of equity capital will be discussed further in this brief. <sup>29</sup> Tr. 27:1892, l. 14.

In conclusion, Staff urges the Commission to give Staff's point recommendation of 9.35 percent (9.35%), and the evidence on which it is based, full consideration, regardless of the fact that it falls outside of the two-hundred (200) basis point zone built around average allowed returns. To the extent the Commission has concerns about Staff's point recommendation falling outside of this zone, Staff recommends the Commission authorize a return on equity closer to 9.70 percent (9.70%), an estimate towards the upper end of Staff's recommended range and within one-hundred (100) basis points of the national average.

#### CAPITAL STRUCTURE

What capital structure should be used for determining AmerenUE's revenue requirement?

A. Staff and AmerenUE are in agreement that AmerenUE's updated capital structure consisting of 47.390% long-term debt, 0% short-term debt, 1.484% preferred stock and 51.126% common equity should be used for the purpose of determining AmerenUE's revenue requirement in this case.

Although Staff and AmerenUE currently agree on the appropriate capital structure to employ in this case, Staff points out that its recommendation regarding capital structure has in fact changed since the filing of this case due to an equity issuance by Ameren that was subsequently invested as equity in AmerenUE. As contained in AmerenUE's direct filing, AmerenUE's capital structure as of the test year was comprised of 47.392 percent (47.392%) common equity, 1.600 percent (1.600%) preferred stock and 51.008 percent (51.008%) total debt.<sup>30</sup> This capital structure was originally accepted by Staff for the purposes of the test year, and was in fact the capital structure upon which Staff relied in establishing a rate of return recommendation.<sup>31</sup>

<sup>&</sup>lt;sup>30</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 18, ll. 14-18.

<sup>&</sup>lt;sup>31</sup> See generally *id*. at 19.

However, as contained in the Rebuttal Testimony of Company witness Michael O'Bryan, "Ameren Corporation made an equity infusion into AmerenUE on September 28, 2009 in the amount of \$436 million...,"<sup>32</sup> resulting in an "...updated capital structure of AmerenUE on December 31, 2009 consist[ing] of 47.390 percent (47.390%) long-term debt, zero percent (0%) short-term debt, 1.484 percent (1.484%) preferred stock and 51.126 percent (51.126%) common equity."<sup>33</sup> Although Staff has not proposed an adjustment to this updated capital structure, and therefore accepts such for the purposes of this case, the Commission should be aware of the implications that this equity infusion may have on AmerenUE's cost of equity capital.

# B. AmerenUE's updated capital structure, which consists of more equity than that contained in AmerenUE's direct filing, is less risky and therefore decreases AmerenUE's cost of equity capital.

While Staff is not directly proposing an adjustment to AmerenUE's return on equity to account for the infusion of equity into AmerenUE's capital structure, Staff points out that the increased percentage of common equity has an impact on AmerenUE's cost of equity capital. Because a fundamental tenant of finance is that a return on an investment should be commensurate with risks assumed by an investors, when equity is infused (and financial risks therefore decrease), so too should investors' required equity returns.

As stated above, AmerenUE's direct filing included a capital structure containing approximately 47 percent (47%) common equity. Staff understands that all cost of capital experts, including AmerenUE witness Dr. Morin, based their analyses on this common equity ratio.<sup>34</sup> However, as also indicated previously, AmerenUE updated its capital structure request at the time of filing of rebuttal testimony, increasing the percentage of equity capital reflected in AmerenUE's capital structure to approximately 51 percent (51%) of total capital - an increase in

<sup>&</sup>lt;sup>32</sup> Ex. 116 AmerenUE witness, O'Bryan rebuttal testimony, p. 1, ll. 22-23 through p. 2, l. 1.

<sup>&</sup>lt;sup>33</sup> *Id.* at p.2, ll. 14-16.

<sup>&</sup>lt;sup>34</sup> AmerenUE witness Dr. Morin Tr. 27:1849, ll. 15-21.

the previous common equity ratio of approximately four percent (4%). As established on crossexamination during the evidentiary hearing by reference to testimony filed by Dr. Morin in a recent electric utility rate case in the state of Washington, Dr. Morin indicates that for every one percent (1%) increase in a utility's common equity ratio the "empirical financial literature demonstrates" that the return on equity decreases by 10 basis points.<sup>35</sup> Under this premise, a four percent (4%) increase in AmerenUE's common equity ratio arguably causes AmerenUE's cost of common equity to decline by forty (40) basis points from the recommendations presented in this proceeding. Because Dr. Morin did not take the change in common equity ratio into account in his updated equity cost estimate, Dr. Morin's updated equity cost estimate of 10.80 percent (10.80%) should be reduced by forty (40) basis points to 10.40 percent (10.40%).

#### **RETURN ON EQUITY**

#### What return on equity should be used for determining AmerenUE's revenue requirement?

Staff recommends that the Commission adopt a return on equity for AmerenUE within the range of 9.00 percent to 9.70 percent (9.00-9.70%), with a specific point recommendation of 9.35 percent (9.35%). Staff's recommendation, as compared to those presented by the other experts in this case is presented as follows:

Witness (Party)	Recommended Range	Point Estimate
Dave Murray (Staff)	9.0 % - 9.7 %	9.35 %
Michael Gorman (MIEC)	9.5 % - 10.5 %	10.0 %
Daniel Lawton (OPC)	9.3 % - 10.9 %	10.1 %
Dr. Roger Morin (AmerenUE)	N/A	10.8 %

Staff's recommendation is influenced by the results of various "traditional" cost of capital methodologies, including the Capital Asset Pricing Model ("CAPM"), the constant-growth discounted cash flow methodology ("constant-growth DCF"), and the multi-stage discounted

<sup>&</sup>lt;sup>35</sup>AmerenUE witness Dr. Morin Tr. 27:1850, ll. 15-25 through Tr. 27:1851, ll. 1-9.

cash flow methodology ("multi-stage DCF"). In addition, Staff confirmed its recommendation with references produced by independent practitioners in the financial sector. These references include reports issued by equity analysts at financial firms such as Goldman Sachs and Bank of America, as well as data published by the Missouri State Employee's Retirement System (MOSERS). Although some may characterize this corroborating information to be "nontraditional" in the context of utility cost-of capital determination, this reliable information both confirms Staff's recommendation and provides the Commission with a relevant real-world frame of reference regarding the expectations of active participants in the capital markets.

- A. Staff's use of the "traditional" cost of capital methodologies supports both Staff's recommended return on equity range of 9.0 percent to 9.7 percent and Staff's recommended return on equity point estimate of 9.35 percent.
  - i. Proxy Groups
    - a. The proxy group used by Staff to estimate AmerenUE's cost of equity capital contains those entities most comparable to AmerenUE, and therefore yields the most reasonable cost of equity estimate presented in this case.

Because AmerenUE is not a publically traded corporation Staff estimated AmerenUE's cost of equity capital by applying certain estimation methodologies to a proxy group of companies regularly traded on the open market. In doing so Staff started with a list of sixty-five (65) publically traded companies classified as "electric utility companies" by Value Line.<sup>36</sup> To this list, Staff applied the following criteria:<sup>37</sup>

- 1. Classified as an electric utility company by Value Line;
- 2. Publically traded stock;
- 3. Classified as a regulated utility by EEI or not followed by EEI;
- 4. At least 70 percent of revenues from electric operations or not followed by AUS;
- 5. Ten year Value Line historical growth data available;
- 6. No reduced dividends since 2006;

<sup>&</sup>lt;sup>36</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, Schedule 8.

<sup>&</sup>lt;sup>37</sup> *Id.* at 20-21.

- 7. Projected growth available from Value Line and Reuters;
- 8. At least investment grade credit rating; and
- 9. Company-owned generating assets.

The application of the above-listed criteria resulted in a group or twelve (12) electric utility companies,<sup>38</sup> the market data of which Staff used to estimate the cost of common equity for AmerenUE. Staff believes that application of the above-listed selection criteria has resulted in the proxy group most comparable to AmerenUE and therefore that most capable of yielding the best approximation of AmerenUE's cost of equity capital.

# b. Staff disagrees with both the criteria used to establish the proxy groups employed by the other experts in this case as well as with the weight given by AmerenUE to estimates derived from methodologies using AmerenUE's proxy groups.

Company witness Dr. Morin selected two proxy groups for the purposes of his constantgrowth-DCF analysis, one based upon the S&P Electric Utility Index and one classified by Dr. Morin as his "Integrated Electric Utility Group."<sup>39</sup> Staff does not believe that Dr. Morin has evaluated these proxy groups using criteria stringent enough to ensure that companies with nonregulated operations are excluded. Companies with significant non-regulated operations generally have increased business risk profiles, causing investors to require higher rates of return.<sup>40</sup> Including these entities thus has a very real impact on certain risk-related inputs used in cost of capital estimation. For example, had Dr. Morin only included in his Integrated Electric Utility Group those companies considered "mostly regulated" by EEI, the average beta of the those companies in that group would have dropped from 0.73 to 0.70.<sup>41</sup> Had Dr. Morin also excluded from this group companies receiving less than 70 percent (70%) of revenues from

 $<sup>^{38}</sup>$  *Id.* at Schedule 9.

<sup>&</sup>lt;sup>39</sup> Ex. 111 AmerenUE witness Morin direct testimony, p. 47, ll. 15-20.

<sup>&</sup>lt;sup>40</sup> Ex. 210 Staff witness Murray rebuttal testimony, p. 7.

<sup>&</sup>lt;sup>41</sup> *Id*. at 9.

electric utility operations (as did Staff) the average beta would have dropped further, to 0.69.<sup>42</sup> These two changes alone would have resulted in a twenty-six (26) basis point reduction in AmerenUE's risk premium estimate.<sup>43</sup> Similarly, had Dr. Morin applied the two above-listed criteria to his S&P Electric Utility group, the average beta of that group would have dropped from 0.76 to 0.70<sup>44</sup>, again resulting in a lower risk premium estimate, and by default a lower overall cost of equity capital estimate.

Although MIEC witness Michael Gorman and Public Counsel witness Daniel Lawton use essentially the same proxy groups as does Dr. Morin, these two witnesses include certain adjustments to correct for the inherent biases in Dr. Morin's overall technique. Specifically, Mr. Lawton combines Dr. Morin's two proxy groups in order to avoid double counting, resulting in a reduction in the upward bias.<sup>45</sup> Mr. Gorman averages all DCF estimations, resulting in a constant-growth DCF estimate based on 5-year EPS projections receiving approximately 11 percent (11%) weight in his final recommendation.<sup>46</sup> This compares to the 57 percent (57%) weight<sup>47</sup> given to the same methodology by Dr. Morin at the time he filed his Direct Testimony.

# ii. The Constant-Growth DCF<sup>48</sup>

# a. Methodological Background<sup>49</sup>

The DCF model is a "market-oriented" approach used to estimate the cost of common equity. The constant-growth form of the DCF model "relies upon the fact that a company's

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>&</sup>lt;sup>44</sup> *Id*. at 10.

<sup>&</sup>lt;sup>45</sup> Ex. 304 Public Counsel witness Lawton direct testimony p. 17.

<sup>&</sup>lt;sup>46</sup> Mr. Gorman's estimate is based on the approximate midpoint of his DCF, Risk Premium and CAPM analysis. Mr. Gorman's DCF estimated is based on the average of his three DCF analyses.

<sup>&</sup>lt;sup>47</sup> See Ex. 111 AmerenUE witness Morin direct testimony, p. 56 (demonstrating that 4/7 (57.14%) of Dr. Morin's recommendation is based upon the results various DCF methodologies), the impropriety of which is further compounded by the fact that Dr. Morin's S&P Electric Utility Index group contains companies that are included in his Integrated Electric Utility Group and is therefore redundant.

<sup>&</sup>lt;sup>48</sup> Also referred to as a "perpetual growth DCF" or "single stage DCF".

<sup>&</sup>lt;sup>49</sup> See Ex. 200 Staff Revenue Requirement Cost of Service Report, Appendix 2, Attachment A.

common stock price is dependent upon the expected cash dividends and upon cash flows received through capital gains or losses that result from stock price changes."<sup>50</sup> As such, this model produces a rate that discounts the sum of the future expected cash flows to the current market price of the stock. This discount rate is the cost of common equity. The constant-growth DCF can be expressed algebraically as follows:

$$\mathbf{k} = \mathbf{D}_1 / \mathbf{P}_0 + \mathbf{g}$$

where:

 $k = cost of common equity \\ D_1 = Expected dividends \\ P_0 = Present stock price \\ D_1/P_0 = expected dividend yield \\ g = expected growth of dividends$ 

b. Although Staff's constant-growth DCF analysis is not the "driver" of Staff overall recommendation, Staff's constantgrowth DCF analysis yields results that support the upper end of Staff's recommended range.

Staff initially attempted to estimate the cost of common equity for the proxy group using a constant-growth DCF, "which in most situations is considered to be ideal for estimating the cost of common equity for regulated utilities due to the maturity of the regulated utility industry."<sup>51</sup> In doing so, Staff estimated an expected dividend growth rate (g) for its proxy group consistent with the growth rates of the companies found in the proxy group, but was unable to obtain a reliable result due to Staff's concerns regarding the volatility of historical growth rates and the sustainability of the relatively high projected five-year Earnings Per Share ("EPS") growth rates.<sup>52</sup> For these reasons, and based upon Staff's expert judgment, Staff estimated the perpetual growth rate component (g) of the constant-growth DCF to be 4 to 5 percent (4-5%).

 $<sup>^{50}</sup>$  *Id*.

<sup>&</sup>lt;sup>51</sup> *Id.* at p. 21, ll. 23-25.

<sup>&</sup>lt;sup>52</sup> See *id*. at 22.

To this growth rate (g) of 4 to 5 percent (4-5%), Staff added a dividend yield component  $(D_1/P_0)$  of 5.2 percent (5.2%).<sup>53</sup> This dividend yield component was derived using the average of the monthly highs and lows of the stock prices of the companies in Staff's proxy group from September-October, 2009, and the dividends expected to be paid in the next twelve months. Combining the growth rate (g) with the dividend yield component  $(D_1/P_0)$  results in an estimated cost of common equity (k) based upon the use of a constant-growth DCF in the range of 9.2 to 10.2 percent (9.2-10.2%).<sup>54</sup>

Although Staff's constant-growth DCF results support the upper end of Staff's recommended range, Staff believes that the current building cycle associated with the electric utility industry is causing five-year projected EPS growth rates to be higher than long-term sustainable growth and requires long-term dividend growth to be evaluated in stages.<sup>55</sup> As this is the very premise of the multi-stage DCF, Staff's recommendation is driven primarily by the results of this multi-stage DCF analysis, which is discussed in detail in the subsequent sections of this brief.

- c. The constant-growth DCF analyses conducted by the other parties rely on unreasonable and improper inputs and therefore yield unreasonable, overstated estimates.
  - i. Exclusive use of only equity analysts' current 5-year earnings per share (EPS) estimates in a constant-growth DCF analysis results in estimated costs of equity capital that are overstated.

The goal of the constant-growth DCF analysis, as used in regulatory finance, is to obtain an estimated cost of equity capital that is based on an expected perpetual growth rate. In order to yield an overall estimation that is reasonable, these expected perpetual growth rates must reflect

<sup>&</sup>lt;sup>53</sup> *Id.* at 23.

<sup>&</sup>lt;sup>54</sup> Id.

<sup>&</sup>lt;sup>55</sup> *Id.* at p. 4, ll. 15-18.

reasonable expectations of dividend growth into perpetuity—forever. The constant-growth DCF models incorporated into the recommendations of Dr. Morin, Mr. Gorman, and Mr. Lawton rely exclusively on equity analysts' relatively high projected five-year EPS growth estimations and, therefore, each likely overstate the cost equity estimated through the use of these models and provide an unreasonable approximation of perpetual growth <sup>56</sup>

To begin, Dr. Morin's use of *only* equity analysts' five-year EPS estimates is the very type of "plug-and-play" analysis that Dr. Morin warns about in his text.<sup>57</sup> Dr. Morin uses Value Line EPS growth projections but *ignores* the dividend per share ("DPS") and book value per share ("BVPS") growth rate projections that are generally published by Value Line directly adjacent to its EPS estimates. As shown on page 30 of the Rebuttal Testimony of Staff witness Stephen Hill, the use of *all* of Value Line's growth rate projections (along with Value Line's year-ahead dividend yield projections for the companies found in Dr. Morin's comparable group) would result in a median constant-growth DCF estimate of 9.37 percent (9.37%). This result, which is based on a larger spectrum of easily accessible information, demonstrates that exclusive reliance on EPS growth rate projections in a constant-growth DCF analysis serves to overstate the cost of equity capital that would, and should, be derived using more reasonable inputs.

Staff's position that analyst growth estimates are overstated is not only a matter of Staff's opinion, but also is supported by an array of financial literature.<sup>58</sup> As published in a 2003 edition of the *Journal of Finance*, "[t]here is no persistence in long-term earnings growth beyond chance, and there is low predictability even with a wide variety of predictor variables.

<sup>&</sup>lt;sup>56</sup> See Ex. 212 Staff witness Hill rebuttal testimony, pp. 26-31.

<sup>&</sup>lt;sup>57</sup> Morin, R., <u>Regulatory Finance, Utilities' Cost of Capital</u>, Public Utility Reports, Arlington, VA, 1994, p. 244; *See also* Ex. 212 Staff witness Hill rebuttal testimony, p. 26.

<sup>&</sup>lt;sup>58</sup> See Ex. 212 Staff witness Hill rebuttal testimony, p. 27, ll. 22 through p. 28, l. 5.

Specifically, IBES growth forecasts are overly optimistic and add little predictive power."<sup>59</sup> More plainly stated in an investor service sponsored by the *Wall Street Journal*:

You should be careful when looking at analyst recommendations for several reasons. First of all, many analysts suffer from a conflict of interest between the firm that employs them and the company whose stocks they track....Since they know that their employer would like to keep the client's business, the analyst may be tempted to issue a rosier outlook for the stock than what it really deserves.<sup>60</sup>

Furthermore, the fact analyst EPS growth estimates may overstate actual growth (and by default the cost of equity capital) has plainly been acknowledge by other witnesses, who nonetheless continue to use that methodology in this case. In response to Data Request 305, Public Counsel witness Daniel Lawton indicated that he "has read research literature that indicates analyst earnings estimates overstate actual or realized growth rates."<sup>61</sup> However, Mr. Lawton still uses those, and only those rates. In addition, Mr. Lawton also excludes all consideration of *negative* projected EPS growth rates, despite agreeing in response to Staff Data Request 304 that investors consider negative information as well as positive information regarding stock valuation.<sup>62</sup> While Staff agrees that investors do not expect negative growth rate expectations. Had Mr. Lawton included the negative as well as the positive projected growth rates, his unreasonable perpetual growth projection would have been reduced to a more reasonable level.

<sup>&</sup>lt;sup>59</sup> Chan and Lakonishok, "The Level and Persistence of Growth Rates," *Journal of Finance* (Vol. LVIII, No. 2, April 2003, p. 643).

<sup>&</sup>lt;sup>60</sup> Ex. 212 Staff witness Hill rebuttal testo,pmu, p. 28 (citing Investorguide.com, "University," Analysts and Earnings Estimates, www.investorguide.com/igustockanalyst.html).

<sup>&</sup>lt;sup>61</sup> Ex. 212 Staff witness Hill rebuttal testimony, p. 35.

<sup>&</sup>lt;sup>62</sup> Public Counsel witness Lawton Tr. 28:2165, ll. 13-16.

Perhaps the best argument against the use of analysts' projected earnings estimates is found in the Direct Testimony of MIEC witness Michael Gorman, who states that despite current conditions *limiting* dividend growth "...the growth component in the DCF result still reflects extraordinary robust growth outlooks."<sup>63</sup> Mr. Gorman continues by stating:

Therefore, the current market assessments for growth for utilities appear to contradict those growth outlooks reflected in security analysts' projections.

Further, the growth rate included in the DCF model is also not sustainable over an indefinite period of time. Therefore, the reliability of the constant growth DCF model is at very best, problematic.<sup>64</sup>

Use of equity analysts' current EPS estimates in a constant-growth DCF analysis results in an estimated cost of equity capital that is overstated and therefore unreasonable for setting rates going forward for AmerenUE.

# ii. The use of a quarterly compounding adjustment in a constant-growth DCF analysis is inconsistent with the information available to investors and results in an overstated cost of equity capital estimate.

In AmerenUE's last rate case, Case No. ER-2008-0318, the Commission made an upward

adjustment of five (5) basis points to the results produced using the constant-growth DCF model

in order to account for the effect of quarterly dividend payments.<sup>65</sup> In doing so, the Commission

stated the following:

[s]ince Ameren does pay quarterly dividends, it is appropriate for this Commission to require the PSC Staff to use the quarterly dividend method when calculating return on equity using the DCF model in future cases. Moreover, if Staff does not agree with that approach in succeeding rate cases, Staff needs to make a more

<sup>&</sup>lt;sup>63</sup> Ex. 408, MIEC witness Gorman direct testimony, p. 25, ll. 1-3.

<sup>&</sup>lt;sup>64</sup> *Id.* at ll. 3-9.

<sup>&</sup>lt;sup>65</sup> See In the Matter of the Application of Union Electric Company, d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area, 271 P.U.R.4th 475 (Report and Order, p. 24, January 27, 2009).

compelling argument grounded in economic reality as to why the Commission should relieve them of this obligation.<sup>66</sup>

Staff did not adjust the results of its constant-growth DCF analysis to account for quarterly compounding of dividends in this case, because the parties in this case have in fact provided the Commission with a more compelling argument for why this adjustment is inappropriate.

To begin, it is Staff's position that the information available to investors regarding dividend yields (i.e. Value Line data) does not reflect quarterly compounding and, as such, Staff does not believe that investors analyze an expected dividend yield based on a quarterly compounding expectation.<sup>67</sup> Furthermore, Staff witness Stephen Hill provides a numerical example in his Surrebuttal Testimony which shows that allowing an increase in the cost of equity to account for quarterly dividend compounding will cause the utility to over-earn its cost of equity capital.<sup>68</sup> Specifically, if the allowed return (the authorized ROE) is based on a DCF model that includes a quarterly compounding adjustment, the resulting growth rate will be higher than that originally assumed in the cost of capital.<sup>69</sup>

Staff is not the only party that disagrees with the use of a quarterly compounding adjustment. During the evidentiary hearing MIEC witness Michael Gorman provided an example using bond payments to illustrate why ratepayers should not be required to provide any additional return that may be expected by investors from reinvestment of quarterly dividend receipts.<sup>70</sup> As similarly acknowledged by Staff witness Stephen Hill, it may well be true that an investor can re-invest his cash flows to earn a higher return, but it is not the responsibility of the

<sup>&</sup>lt;sup>66</sup> Id.

<sup>&</sup>lt;sup>67</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 23, ll. 23-28.

<sup>&</sup>lt;sup>68</sup> See Ex. 213 Staff witness Hill surrebuttal testimony, p. 14, l. 21 to p. 16, l. 8.

<sup>&</sup>lt;sup>69</sup> Id.

<sup>&</sup>lt;sup>70</sup> Tr. Vol. 27 p. 1989, l. 20 to p. 1994, l. 2.

utility ratepayer to provide that return *for* the investor. If the ratepayer is required to provide that additional re-investment return through an upward adjustment to the allowed return, then the investor will earn that return twice - once through the higher allowed return and once when he or she re-invests the dividends.<sup>71</sup>

In conclusion, it is inappropriate to make a quarterly compounding adjustment to the constant-growth DCF methodology. Although such an adjustment (though 15 basis points higher than that previous awarded by this Commission) was included in the Rebuttal Testimony of Company witness Dr. Morin, Dr. Morin himself admits that he has not made such an adjustment in the last *forty or fifty cases* in which he has testified.<sup>72</sup> Dr. Morin's twenty (20) basis point adjustment is unnecessary and should be removed. Solely removing this adjustment, the mean result of Morin's updated cost of equity analyses would be 10.45 percent.<sup>73</sup>

#### iii. The Multi-Stage DCF

#### a. Methodological Background

Staff's recommended return on equity is driven primarily by the results of a multi-stage DCF evaluation, which produced cost of equity estimates from 8.7 percent to 9.7 percent (8.7-9.7%). As contained in the Direct Testimony of Staff witness David Murray, "[a]lthough a [multi-stage DCF methodology] may seem complex on its face, [this methodology] is simply determining the discount rate that causes current stock prices to equal the present value of future expected dividends."<sup>74</sup> In this respect, the multi-stage DCF methodology and the traditional constant-growth DCF methodology are based on the same underlying theory, and differ only in the assumptions regarding the nature of the expected growth rate. The traditional constant-

<sup>&</sup>lt;sup>71</sup> See generally Ex. 213 Staff witness Hill surrebuttal testimony p. 14, ll. 5-20 (citing FERC ruling on quarterly dividend compounding).

<sup>&</sup>lt;sup>72</sup> Tr. Vol. 27 p. 1844, ll.5-16.

<sup>&</sup>lt;sup>73</sup> *Id.* at p. 16, 1. 32.

<sup>&</sup>lt;sup>74</sup> *Id.* at p. 24, ll. 6-8.

growth DCF methodology assumes one constant growth rate into perpetuity, while the multistage DCF methodology assumes that growth will happen in two or more discrete stages. Although such multi-stage methodologies are generally reserved for industries in the early stages of a growth cycle, a multi-stage evaluation can also be used in an analysis of mature industries going through "periods of transition."<sup>75</sup> Staff has elected to rely primarily on a multi-stage, as opposed to a constant-growth, DCF methodology in order to more accurately capture investor expectations related to one such transitional period - the current building cycle in the electric utility industry. Because, in Staff's opinion, this building cycle requires expected dividend growth to be evaluated in stages, Staff opted to use a methodology predicated upon this assumption.

#### b. Staff's application of the multi-stage DCF methodology is consistent with sound financial theory and results in an estimation that is a reasonable approximation of AmerenUE's cost of equity capital.

Staff's multi-stage DCF analysis incorporates three distinct stages of growth. In stage 1, comprised of years 1 through 5, Staff relied on equity analysts' average projected five-year EPS growth rate of each proxy company, as provided by Reuters and Value Line.<sup>76</sup> Staff chose to rely on these projections in its multi-stage DCF analysis due to the fact that as stated above these analyst estimates are actually based on five-year projections, and in Staff's opinion are, therefore, reasonable over that period.<sup>77</sup> To the contrary, Staff chose not to rely only on analyst growth projections in its constant-growth DCF analysis, as in Staff's opinion these five-year EPS projections are not sustainable, and are therefore not reasonable estimates of expected growth into perpetuity.

<sup>&</sup>lt;sup>75</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 25.

 <sup>&</sup>lt;sup>76</sup> See Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 26.
 <sup>77</sup> Id.

Stage 2, representing years six (6) through ten (10), represents a linear decline in expected growth rates from stage 1 to stage 3. In stage 3, representing years eleven (11) through two-hundred (200). Staff selected a long-term growth rate of 3.1 percent (3.1%).<sup>78</sup> This estimate is based upon projected electric consumption growth, increased by an inflation factor. Specifically, Staff relied on electricity consumption projections provided by the federal Energy Information Administration, which projects that electricity demand will increase by approximately 1.0 percent (1.0%) per year until 2030.<sup>79</sup> For the purposes of an inflation factor Staff reviewed inflation projections issued by the Congressional Budget Office, which show a projected annual inflation rate of approximately 2.0 percent (2.0%) for the period of 2016 to 2019.<sup>80</sup> Staff also reviewed investors' required returns for inflation based on differences in the yields for 20-year U.S. Treasury bonds and 20-year Treasury Inflation Protected Securities.<sup>81</sup> Staff elected to utilize this "consumption plus inflation" approach, as in Staff's opinion it is not reasonable to assume that electric growth will mirror that of the larger economy (i.e. GDP growth) in the future, and because electric utility demand growth has generally lagged that of the larger economy in the past. As shown in Mr. Hill's Rebuttal Schedule 1, over the past fifty (50) years electric utility growth in earnings, dividends and book value has averaged about 3.5 percent (3.5%), while the GDP growth has averaged approximately 6.5 percent (6.5%), approximately double the electric growth value.

In conclusion, Staff has elected to rely primarily on a multi-stage DCF methodology in order to more accurately model normal growth, consistent with industry fundamentals. Staff believes that this analysis, which produces a cost of equity estimation of 8.7 percent to

<sup>&</sup>lt;sup>78</sup> *Id.* at 27. <sup>79</sup> *Id.* at 26.

<sup>&</sup>lt;sup>80</sup> Id.

<sup>&</sup>lt;sup>81</sup> *Id.* at 27.

9.7percent (8.7-9.7%), is reasonable and supports Staff overall recommendation of 9.0 percent to 9.7 percent (9.0-9.7%).

### c. The multi-stage DCF models presented by Public Counsel and MIEC in this case include unrealistic terminal stage growth rates that serve to overstate the cost of equity capital.

The multi-stage DCF models presented by both Public Counsel and MIEC in this case include unrealistic terminal stage growth rates that serve to overstate the cost of equity capital.<sup>82</sup> Public Counsel witness Mr. Lawton for example assumes in his multi-stage DCF model that equity analysts' five-year EPS growth rate projections will be consistent with *perpetual* growth rates, regardless of the fact that he was aware of no study that supported the use of five-year earnings growth as a proxy for long-term dividend growth in the DCF model.<sup>83</sup> As stated above, Staff chose not to rely on such projections in the final stage of its constant-growth DCF analysis, as in Staff's opinion, and as corroborated by independent information, these projections are not sustainable and are therefore not reasonable estimates of expected growth into perpetuity. This same logic applies to the final stage of a multi-stage DCF analysis, which also attempts to estimate a perpetual growth rate, and it is for this same reason that Staff did not use these analysts' projections in the final stage of Staff's multi-stage analysis.

MIEC witness Michael Gorman relies on expected Gross Domestic Product ("GDP") growth to establish a rate in the final stage of his multi-stage DCF analysis. Although this technique is sometimes used in estimating terminal growth, Mr. Gorman recognizes that "...GDP growth is a reasonable proxy for the *highest* sustainable long term growth rate of a utility."<sup>84</sup> As further shown by Staff witness Stephen Hill in his Rebuttal Testimony, projected GDP has historically been approximately *double* the actual growth rate in earnings, dividends and book

<sup>&</sup>lt;sup>82</sup> AmerenUE Witness Dr. Morin did not perform a multi-stage DCF analysis.

<sup>&</sup>lt;sup>83</sup> Ex. 212 Staff witness Hill rebuttal testimony p. 37, ll. 22-24.

<sup>&</sup>lt;sup>84</sup> Ex. 408 MIEC witness Gorman direct testimony, p. 28, ll. 10-13 (emphasis added).

value for electric utilities,<sup>85</sup> and for this reason alone, the use of GDP growth significantly overstates long-term electric utility growth. In addition, the information in this case clearly demonstrates that expected electric utility consumption is lower than that of expected growth in GDP,<sup>86</sup> a fact that AmerenUE witness Julie Cannell acknowledges could have an effect on utility growth rate expectations.<sup>87</sup>

In conclusion, for the reasons contained herein and as well as those contained in the testimony pre-filed in this matter, neither equity analysts' five-year EPS projections nor expected GDP growth serve as reasonable estimates of long-term sustainable electric utility growth. For these reasons, multi-stage DCF models incorporating these inputs overstate the actual cost of equity capital and should be reduced accordingly.

### iv. The Capital Asset Pricing Model (CAPM)<sup>88</sup>

#### a. Methodological Background

The CAPM describes the relationship between the risk of a particular investment and the risk of the market as a whole. The purpose of the CAPM is to identify a rate of return that investors expect a security to earn in order to have such returns be comparable to those earned by securities of similar risk.<sup>89</sup> The CAPM is expressed algebraically as follows:

$$\mathbf{k} = \mathbf{R}_{\mathbf{f}} + \boldsymbol{\beta} \left( \mathbf{R}_{\mathbf{m}} - \mathbf{R}_{\mathbf{f}} \right)$$

where:

k	= Expected Return on Equity		
$\mathbf{R_{f}}$	= The Risk-Free Rate		
	• The return that can be achieve without risk		
-			

ß = Beta

• An indicator of a security's risk relative to the market as a whole, and

<sup>&</sup>lt;sup>85</sup> Ex. 212 Staff witness Hill rebuttal testimony, Exhibit 1.

<sup>&</sup>lt;sup>86</sup> SeeEx. 210 Staff witness Murray rebuttal testimony, pp. 16-17.

<sup>&</sup>lt;sup>87</sup> Tr: Vol. 28 p. 2289, ll. 9-21.

<sup>&</sup>lt;sup>88</sup> See Ex. 200 Staff Revenue Requirement Cost of Service Report, Appendix 2, Attachment B.

<sup>&</sup>lt;sup>89</sup> Id.

#### $R_m - R_f$ = The Market Risk Premium

- The expected return from holding a portfolio comprised of the entire market less the expected return from holding an investment yielding the risk free rate.
- b. Due to current market conditions affecting the inputs used in Staff's CAPM analysis, the results of Staff's CAPM analysis were not factored into Staff's overall return on equity recommendation.

For the purposes of this case Staff did perform a CAPM analysis, but did *not* explicitly factor the results of such analysis into Staff's recommended return on equity. Because Staff did not attempt to estimate an implied equity risk premium due to current capital market conditions, Staff did not believe its inputs were as reliable as the market inputs, *i.e.* stock prices, Staff used in its DCF analysis. However, because the other experts in this case performed CAPM analyses, Staff has in testimony, and does herein, provide the following results of its CAPM analysis.

As demonstrated by the formula above, a CAPM analysis requires a risk-free rate, a beta, and a market risk premium. For its risk-free rate Staff used the average monthly yield of U.S Treasury Bonds for the three months<sup>90</sup> directly preceding the filing of Staff's direct case.<sup>91</sup> This selection resulted in a risk free rate of 4.23 percent (4.23%).<sup>92</sup> As a measure of beta, Staff used 0.66, representing the average of the betas of Staff's proxy group, as indicated by Value Line.<sup>93</sup>

To determine the final component, the market risk premium, Staff relied on two separate risk premium estimates, both based on historical differences between earned returns on stocks and earned returns on bonds.<sup>94</sup> More specifically, Staff used a risk premium based on the

<sup>90</sup> As stated in Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 30, this is a slight variation from Staff's traditional methodology. Staff has previously used the average yield for the most recent one month, but chose not to do so in this case in order to mitigate fluctuation in T-Bond yields. Had Staff used its traditional methodology, Staff's CAPM estimate would have been eight (8) basis points higher.

<sup>&</sup>lt;sup>91</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 30.

<sup>&</sup>lt;sup>92</sup> Id.

 $<sup>^{93}</sup>$  *Id*.

<sup>&</sup>lt;sup>94</sup> *Id*. at 31.

arithmetic average of historical return differences from 1926 to 2008.<sup>95</sup> This calculation, based upon an *arithmetic* average, yielded a risk premium estimate of 5.60 percent (5.60%).<sup>96</sup> Staff also used a risk premium based upon the geometric average of historical return differences from 1926 to 2008.<sup>97</sup> This calculation, based upon a *geometric* average, yielded a risk premium estimate of 4.50 percent (4.50%). Placed in the CAPM formula, these risk premium estimates produced results of 7.94 percent (7.94%) and 6.81 percent (6.81%), respectively.<sup>98</sup> Because Staff did not believe either of these results were consistent with the current implied cost of equity using DCF methodologies or corroborated by those in the investment field, Staff chose not to give its CAPM results any weight in the calculation of Staff's final ROE recommendation. In this way, Staff's overall recommendation is based on a balanced approach that places less emphasis on the high results produced by the constant-growth DCF methodology and the low results produced by the traditional CAPM.

### c. Based upon the application of questionable financial theory, the Commission should approach with skepticism the CAPM and historical risk premium estimates of the other witnesses in this case.

The Commission should approach with skepticism the CAPM and historical risk premium analyses provided by the other non-Staff witnesses, albeit for different reasons. Specifically, Staff believes (1) the respective CAPM analyses provided by AmerenUE witness Dr. Morin and Public Counsel witness Daniel Lawton are improperly based upon the sole use of arithmetic averages in the market-risk premium component, and (2) Dr. Morin's historical risk premium analysis is overstated due to his change in methodology.

<sup>98</sup> Id.

<sup>&</sup>lt;sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> Id.

<sup>&</sup>lt;sup>97</sup> Id.

i. Staff continues to believe the sole use of an arithmetic average in the market rick premium component of a CAPM analysis is inappropriate, and that therefore a CAPM analysis including only arithmetic averages results in an estimate that overstates AmerenUE's cost of equity capital, at least under normal market conditions.

Although the use of an arithmetic average may be appropriate for use in evaluating investments with a one-year investment horizon, "Staff has consistently viewed investments in utility stocks as a long-term, multi-period proposition, [and therefore] has consistently considered [g]eometric averages as being the most appropriate for projecting future risk premiums."<sup>99</sup> Staff continues to believe that this approach is consistent with the principles taught in the Chartered Financial Analyst (CFA) Program and supported by the academic texts on the topic.<sup>100</sup> Staff's position is further supported by Public Counsel witness Daniel Lawton, who at hearing provided his independent, corroborating opinion that the use of the geometric average is the "most appropriate" in determining a market risk premium.<sup>101</sup>

Although, as indicated in testimony, Staff expects "continued academic debate on this topic," this is not purely an academic endeavor. To the contrary, the particular averaging technique used in a CAPM analysis has a very real effect on the cost of equity estimate produced by the CAPM. As indicated at hearing by Public Counsel witness Daniel Lawton, the use of an arithmetic average *always* produces a market risk premium *greater than or equal to* that produced using a geometric average.<sup>102</sup> Therefore, as a matter of simple logic, if the use of the arithmetic average is improper, as is argued by Staff, then market risk premiums produced using that averaging technique will *always* be *greater than or equal to* those using the alternative, proper, geometric averaging technique. If only these arithmetic-averaged market risk premiums

<sup>&</sup>lt;sup>99</sup> Ex. 211 Staff witness Murray surrebuttal testimony, pp. 16-17.

<sup>&</sup>lt;sup>100</sup> *Id.* at 17-20.

<sup>&</sup>lt;sup>101</sup> Tr. Vol. 28 p. 2175, ll. 19-25.

<sup>&</sup>lt;sup>102</sup> Tr.Vol. 28 p.:2175, ll. 14-18.

are incorporated into a cost of equity recommendation, as is this case with the technique of Dr. Morin, the result will be, and is, an overstated cost of equity capital. In other words, appropriately incorporating both geometric and arithmetic averages to AmerenUE's CAPM analysis would produce a result less than or equal to AmerenUE's 9.70 percent (9.70%) CAPM estimate.

# ii. Inconsistent application by Company witness Dr. Morin of his historical risk premium analysis<sup>103</sup> has resulted in a cost of equity estimate that noticeably higher than those he has produced in recent cases.

Furthermore, Dr. Morin's inconsistent application of the historical risk premium methodology between AmerenUE's last rate case and its current increase request similarly results in an overstated AmerenUE cost of capital recommendation. Specifically, Dr. Morin changed his historical risk premium analysis by eliminating an index comprised only of electric utility companies, and substituting in its place an index that includes electric as well as other utility companies.<sup>104</sup> This change alone adds forty (40) basis points to the result of that analysis.<sup>105</sup> Dr. Morin attempts to explain this change by indicating that the electric utility index (Moody's) was discontinued in 2002. This is true. However, the fact that Moody's Electric Index was discontinued in 2002 had no effect on Dr. Morin's analysis in mid- to late- 2008, but apparently is relevant now.

Dr. Morin also changed the bond yield on which his historical risk premium analysis is based. In AmerenUE's last rate proceeding Dr. Morin used long-term U.S. Treasury Bonds as

<sup>&</sup>lt;sup>103</sup> Although the CAPM is one type of risk premium analysis, Dr. Morin also conducts a separate "historical risk premium analysis." Although this analysis is practically distinct from the CAPM, it does rely on a risk premium estimate.

<sup>&</sup>lt;sup>104</sup> Ex. 212 Staff witness Hill rebuttal testimony, p. 8.

<sup>&</sup>lt;sup>105</sup> *Id.* at ll. 6-16.
the base yield to which he added his historical risk premium.<sup>106</sup> In the current case Dr. Morin uses a utility bond yield.<sup>107</sup> Dr. Morin does disclose this change in his direct testimony and, when challenged provided his rationale for the change stating that the change was based (1) upon the widening of yield spreads between U.S. Treasury Bonds and corporate bond yields resulting from the financial crisis and (2) upon his belief that a utility's cost of equity "will track its cost of debt more closely than it will track the government bond yield."<sup>108</sup> Staff disagrees. As shown on page 12 of the Rebuttal Testimony of Staff witness Stephen Hill, yield spreads between U.S. Treasury Bonds and corporate bond yields have recently fallen to *below* pre-financial crisis levels. Moreover, if Dr. Morin believes that the cost of equity is better tracked by the use of utility bonds, why does Dr. Morin continue to use U.S. Treasury Bond yields as the basis for his CAPM analysis? This distinction, carved out for the purpose of a risk premium analysis, is contradictory and illogical.

Dr. Morin also completely eliminated an "Allowed Return Risk Premium" analysis that he employed in AmerenUE's last general electric rate proceeding. This analysis, if conducted consistently with his previous applications, would have produced an equity cost estimate of 10.1 percent (10.1%), and, therefore, would have reduced Dr. Morin's equity return recommendation based upon an average of his methodologies.<sup>109</sup>

In conclusion, a consistent application of Dr. Morin's historical risk premium methodology in this proceeding with that which he provided in AmerenUE's last general electric

<sup>&</sup>lt;sup>106</sup> Id.

<sup>&</sup>lt;sup>107</sup> Ex. 111 AmerenUE witness Morin direct testimony, pp. 38-39.

 $<sup>^{108}</sup>$  Id.

<sup>&</sup>lt;sup>109</sup> Ex. 212 Staff witness Hill rebuttal testimony, p. 14.

rate proceeding would have produced a cost of capital estimate approximately ninety (90) basis points below that which he provided in this case.<sup>110</sup>

## B. In addition to the use of traditional cost of capital estimation techniques, Staff has incorporated into this case additional evidence that independently corroborates the reasonableness of Staff's return on equity recommendation.

To further check the reasonableness of Staff's recommended return on equity in this case Staff has referenced certain information used by practitioners in the financial investment community. Although this information may be characterized by some to be "non-traditional" in the context of a utility cost of capital determination, this information provides an exceptional amount of direct, unfiltered insight into investor perceptions and investor expectations. Specifically, these sources include financial analyst research reports published on both Ameren and the electric utility industry in general by analysts at firms such as Goldman Sachs, J.P. Morgan, and Bank of America. Furthermore, Staff has reviewed public information regarding expected returns for common equity investments provided by the Missouri State Employee's Retirement System (MOSERS), as well as certain "rules of thumb" incorporated into the curriculum of the Chartered Financial Analyst Program. According to these independent sources, these institutional investors required return on common equity ranges from eight to nine percent (8-9%). In Staff's opinion, and as explained in Staff's testimony, these references demonstrate that Staff's recommendation is consistent with the expected returns used by those in the investment community. In sum, this information provides independent confirmation that Staff's equity return recommendation presented in this case is both accurate and relatively conservative, and would provide AmerenUE an opportunity to earn a return commensurate with returns in alternative investments, as required by Hope and Bluefield.

<sup>&</sup>lt;sup>110</sup> *Id.* at p. 10, ll. 19-21.

# i. The equity analyst reports cited by Staff are excellent gauges of investor expectations and these reports support Staff's recommended return on equity in this case.

As confirmed in the evidentiary hearing by AmerenUE witness Julie Cannell, equity analyst research reports can be considered a good gauge for investor perceptions.<sup>111</sup> Staff has reviewed a number of these reports in the context of this case and has "found the commentary provided by Goldman Sachs and Bank of America to be especially relevant in testing the reasonableness of Staff's estimated cost of equity..."<sup>112</sup> Specifically, in recent research reports covering the electric utility industry, Goldman Sachs, a firm acknowledged by AmerenUE witnesses to be "reliable"<sup>113</sup> and "credible"<sup>114</sup>, has employed a cost of common equity of nine percent (9%) and a terminal growth rate (comparable to stage 3 of Staff's multi-stage DCF) of 2.5 percent (2.5%).<sup>115</sup> Similarly, a break-down of the individual components of a cost of capital analysis provided in equity research reports issued by Bank of America results in a cost of equity discount rate, i.e. the cost of common equity, slightly below nine percent (9%), with an assumed three percent (3%) dividend growth rate.<sup>116</sup>

The equity analyst research reports cited in testimony of Staff were composed by independent professionals in the financial investment community. Considering that the other rate of return witnesses in this case place almost full faith in the reliability of using equity analysts' five--year EPS forecasts for purposes of estimating investors' implied cost of equity, this inherent contradiction speaks for itself. These equity analyst research reports support and

<sup>&</sup>lt;sup>111</sup> Tr. Vol. 19 p.2288, ll. 7-10.

<sup>&</sup>lt;sup>112</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 32, ll. 14-16.

<sup>&</sup>lt;sup>113</sup> Tr. Vol. 19 p. 2288, ll. 22-23 (stating that Goldman Sachs is reliable to the best of Ms Cannell's knowledge).

<sup>&</sup>lt;sup>114</sup> Ex. 210 Staff witness Murray rebuttal testimony, p. 28, ll. 17-20 (referencing Dr. Morin's response to Data Request 0317).

<sup>&</sup>lt;sup>115</sup> See Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 32, 11.18-29.

<sup>&</sup>lt;sup>116</sup> *Id.* at 34.

corroborate Staff's estimated cost of common equity and, therefore, Staff's recommended return on that common equity.

> ii. The returns expected by the large institutional investor MOSERS on investments which are arguably riskier than AmerenUE are at levels below Staff's recommended return on equity and therefore support Staff's recommendation in this case.

In order to test the reasonableness of Staff's recommended return on equity, Staff also reviewed expected returns for various assets classes held by the large institutional investor MOSERS. This information, publically available and accessible to investors, demonstrates "expected returns for large capitalization domestic equities [of] only 8.50 percent."<sup>117</sup> Because this large cap portfolio likely reflects the risk of the market as whole (i.e. a beta close to 1.0), and the utility portfolios (proxy groups) examined by the experts in this matter confirm utility stocks to be less risky (i.e. betas approximately 0.70), it could be argued that the 8.50 percent (8.5%) MOSERS expectation is a conservative estimate of the cost of equity for an integrated electric utility.<sup>118</sup> At the very least, Staff believes that this information provide the Commission with another independent frame of reference in reaching its decision on this issue.

## **Conclusion**

In conclusion, Staff continues to recommend that the Commission authorize an overall rate of return for AmerenUE of 7.39 percent to 7.72 percent (7.39-7.72%), based upon Staff's recommended return on common equity of 9.00 percent to 9.70 percent (9.00-9.70%). Staff has predicated this recommendation on the principle that an appropriate rate of return should include an equity component that reflects a utility's cost of equity capital....and not one that mirrors national award averages or serves as mitigation for regulatory lag. Staff estimated the cost of

<sup>&</sup>lt;sup>117</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report, p. 35, ll. 24-25.

<sup>&</sup>lt;sup>118</sup> See generally id. at 35.

this capital using sound financial theory and has confirmed its estimate with the work of analysts who, like Staff, have attempted to capture the realistic expectations of investors in the real world.

As recently stated by the Missouri Court of Appeals, "[d]etermining a rate of return on equity, [sic], is imprecise and involves balancing a utility's need to compensate investors against its need to keep prices low for consumers."<sup>119</sup> Staff believes that its recommendation accomplishes these goals. If accepted by this Commission, Staff's recommended return on equity point estimate of 9.35 percent (9.35%) will provide AmerenUE with the opportunity to earn, from ratepayers, approximately \$288 million in annual profit. Staff believes that this recommended return on equity is sufficient to allow AmerenUE to maintain its creditworthiness and to attract capital, as mandated by the decisions in *Hope* and *Bluefield*.

## DEPRECIATION EXPENSE (List of Issues No. 12; ~\$16.4 million)

The assumptions underlying Staff's depreciation recommendation are simple, and have been the basis of Commission decisions for many years:

- Some units live longer than average;
- Some units live less than average;
- The physical sites of generation plants and the balance of plant tend to remain useful to the utility for very long periods of time, with no foreseeable retirement of the current plant sites;
- When there is no good way available to calculate the remaining life of each particular unit, much less of entire plant sites, it's a good idea to stick with the mass property whole life technique.

These assumptions - in turn, rely on the assumptions that an average service life is, by definition, the average life of all units in that universe; and that physical plant sites are very valuable. The value of these locations is two-fold - both the confrontation of a "not in my back

<sup>&</sup>lt;sup>119</sup> State ex rel. Public Counsel v. Pub. Serv. Comm'n, 274 S.W.3d 569, 573-574 (Mo.App. 2009).

yard" attitude when alternative sites are pursued, and the existence of utility infrastructure such as transmission lines and equipment, water access and returns, pipeline and rail access, and more mundane, but numerous balance of plant amenities - parking lots, offices, maintenance sheds, etc.

AmerenUE's annual depreciation expense request also relies on assumptions:

- Each unit, and the entire physical site it is located on including the balance of plant will be retired on the 20<sup>th</sup> anniversary of the addition of some environmental upgrades;
- It is not necessary to study the pros and cons, from an economic perspective, of the retirement of plants that admittedly have no foreseeable physical limitations to their continued operation, and whose retirement will be driven by economic considerations;
- Cash is king.

AmerenUE's assumptions also rely on other assumptions – that doing marginally better than the completely arbitrary studies AmerenUE presented in the last case where it presented a depreciation study, Case No. ER-2007-0002, is good enough for this Commission; that it is acceptable to avoid doing a study with the excuse that the study would be "subject to attack;" and that cash is king.

#### **Depreciation**

Depreciation is the loss in service value not restored by current maintenance, which is due to all factors causing ultimate retirement of the property for which the utility is not protected by insurance. These factors include wear and tear, decay, inadequacy, obsolescence, changes in the art, and requirements of public authorities.<sup>120</sup>

The purpose of depreciation in a regulatory setting is to recover the cost of capital assets over the useful lives of the assets, using a method of depreciation that allocates, in a systematic

<sup>&</sup>lt;sup>120</sup> Ex 200 Staff Revenue Requirement Cost of Service Report p. 96, ll. 5-7.

and rational manner, the service value of the depreciable property over the service life of the property. The depreciation rate for each plant account is designed to recover, over the average service life of the assets in that account, the original cost of the assets, plus an estimate for any cost of removal less scrap value. Annual depreciation expense for a plant account is the depreciation rate for that plant account multiplied by the balance of plant dollars in that account. The annual depreciation expense returns to AmerenUE's shareholders a portion of the costs of the capital assets, or a return of equity.<sup>121</sup>

## **Studies Presented**

#### Staff

For all plant accounts, Staff used the straight line method, broad group-average life procedure and whole life technique depreciation system for its depreciation study of AmerenUE's capital assets.<sup>122</sup> For all plant accounts, other than the Callaway Nuclear Plant, Staff used a mass property approach.<sup>123</sup> This is simply straight line depreciation of the dollars of capital invested in a group of assets that has been assigned to one account.<sup>124</sup> The results of Staff's study are presented in Schedule AWR-5B of Staff Witness Art Rice's Surrebuttal Testimony in the "Combined Deprec. Rate (%)" column.<sup>125</sup> Staff uses the following formula to calculate a depreciation rate for each plant account:

Depreciation Rate = (100 % -Net Salvage %) ÷ (Average Service Life).<sup>126</sup>

Staff's annual depreciation expense recommendation includes a component for net salvage, based on the interim net salvage value.<sup>127</sup> For production plants, other than nuclear

<sup>&</sup>lt;sup>121</sup> Ex 200 Staff Revenue Requirement Cost of Service Report p. 96, ll. 8-19.

<sup>&</sup>lt;sup>122</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 97 ll. 12-16.

<sup>&</sup>lt;sup>123</sup> Id at p. 102 ll. 28-29.

<sup>&</sup>lt;sup>124</sup> Ex. 231Staff Depreciation Manual p. 79.

<sup>&</sup>lt;sup>125</sup> Ex. 217Staff witness Rice surrebuttal testimony, Sch. AWR-5B.

<sup>&</sup>lt;sup>126</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 97, ll. 16 – 18.

which has a decommissioning fund, this includes a level of expense that is estimated to likely be a bit high, as interim net salvage tends to be more expensive than terminal net salvage.<sup>128</sup>

Staff performed its depreciation study of AmerenUE's coal-fired steam production plant as one large production fleet with many production units. <sup>129</sup> Staff did not modify its depreciation study to include AmerenUE's assumed timing of retirement of individual production units.<sup>130</sup> This same type of depreciation analysis was also used on the hydraulic plant and combustion turbine plant accounts.<sup>131</sup> Staff's annual depreciation expense recommendation is approximately \$330 million.<sup>132</sup> Staff's approach included recognizing the capital necessary for the eventual retirement of the plant, and allowing recovery of that capital over the useful life of the plant.<sup>133</sup>

MIEC

MIEC based its primary recommendation for rates for all non-Callaway plant accounts on a mass property study.<sup>134</sup> MIEC also prepared a lifespan-based study, utilizing, with adjustments, AmerenUE's assumed life spans for steam and hydro plant accounts.<sup>135</sup> Both MIEC recommendations were for annual depreciation expense well below Staff's recommended levels. MIEC recommends an approximate \$81 million reduction to AmerenUE's request, based on a mass property study, and an approximate \$55 million reduction to AmerenUE's request, based on a life span study.<sup>136</sup>

<sup>&</sup>lt;sup>127</sup> *Id.* at p. 99 ll. 28-30.

<sup>&</sup>lt;sup>128</sup> MIEC witness Dunkel, Tr. Vol. 24, p. 1459 l. 10to- p. 1460 l. 5.

<sup>&</sup>lt;sup>129</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p 102 ll. 28-29; Ex 231Staff Depreciation Manual p 79.

<sup>&</sup>lt;sup>130</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 102 ll. 28-29.

<sup>&</sup>lt;sup>131</sup> *Id*.

<sup>&</sup>lt;sup>132</sup> Ex. 217 Staff witness Rice surrebuttal testimony, Sch. AWR-1B.

<sup>&</sup>lt;sup>133</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 99 l. 16 to p. 100 l. 13.

<sup>&</sup>lt;sup>134</sup> MIEC witness Selecky, Tr. Vol. 24, p.1536 ll. 11-16.

<sup>&</sup>lt;sup>135</sup> Ex 403 MIEC witness Selecky direct testimony p. 4 ll. 6-12.

<sup>&</sup>lt;sup>136</sup> Id. at p. 3 l. 39 to p. 4 l. 12.

### AmerenUE

AmerenUE based its request for annual depreciation expense for all plant accounts other than Callaway, steam production plant, and hydro production plant on a mass property approach.<sup>137</sup> AmerenUE's proposed depreciation rates are remaining life rates, compensating each individual account for any reserve imbalance between calculated accumulated reserves and book reserves.<sup>138</sup> For Callaway Nuclear production, steam production plant, and hydro production plant accounts, AmerenUE based its requested expense on depreciation rates developed using a proposed individual production unit retirement date life span method, including elimination of terminal net salvage from rates, <sup>139</sup> and compensating for over- or underaccrued depreciation reserves.<sup>140</sup> AmerenUE's request for recovering all capital associated with these plants over each plant's projected unlived life span, working backwards from the assumed retirement dates of that plant, but excluding terminal net salvage, results in annual depreciation expense of approximately \$345 million.<sup>141</sup> However, by excluding terminal net salvage, this approach fails to recognize the capital necessary for the eventual retirement of the plant, or allow recovery of that capital over the useful life of the plant.<sup>142</sup> Staff has calculated that allowing for terminal net salvage, and using AmerenUE's assumed retirement dates results in the rates shown in the column C of Schedule AWR-SUR-1-1 of Staff Witness Art Rice's Surrebuttal Testimony, for total annual depreciation expense of approximately \$364 million.<sup>143</sup>

Mass Property versus Life Span

<sup>&</sup>lt;sup>137</sup> Ex 104 AmerenUE witness Wiedmayer direct testimony, Sch. JFW-E1.

<sup>&</sup>lt;sup>138</sup> *Id.* at, p. 43 ll. 5-23.

<sup>&</sup>lt;sup>139</sup> Staff witness Rice Tr. Vol. 24 p. 1414 l. 15 to p.1415 l. 3.

<sup>&</sup>lt;sup>140</sup> Ex 104 AmerenUE witness Wiedmayer direct testimony p. 43 ll. 18-23.

<sup>&</sup>lt;sup>141</sup> Ex 217 Staff witness Rice surrebuttal testimony, Sch. AWR-1B.

<sup>&</sup>lt;sup>142</sup> Staff witness Rice Tr. Vol. 33 p 1414 l. 24 to p. 1415 l. 3 and p. 1418 l. 17 to p. 1419 l. 2.

<sup>&</sup>lt;sup>143</sup> Ex 217 Staff witness Rice surrebuttal testimony, Sch. AWR-1B.

Use of a mass property study bases the depreciation rate on the estimated average service life of all plant in service for a particular account.<sup>144</sup> The average service life is average life of all units of property in that account, or universe.<sup>145</sup> Use of a life span study assumes all equipment in a particular account, including equipment installed in recent years will be retired at a single shut down date.<sup>146</sup>

Both methods are acceptable for AmerenUE's coal-fired steam production plant, and AmerenUE's hydro production plant.<sup>147</sup> Proper recovery depends on the quality of the information used, not the choice of method.<sup>148</sup> An inherent problem with the lifespan technique is that if the dates used for the plant retirements are too early, current ratepayers overpay, with no opportunity for recourse.<sup>149</sup> There is still uncertainty in AmerenUE's proffered dates.<sup>150</sup> During the hearing, even greater doubt was cast on AmerenUE's proffered assumed retirement dates, as will be discussed, in detail, below.

Conducting a whole life, mass property study does not rely on an assumption that plants have an infinite life.<sup>151</sup> Staff recognizes that prior Commission orders do not prohibit utilization of the life span technique,<sup>152</sup> however Staff's practice, in general, has been to use the mass property technique where it is not possible to calculate reliable estimates of the date the plant will actually retire.<sup>153</sup> Staff used the life span technique for the Callaway nuclear plant, as there was a reasonable retirement date available for truncating the life of the plant.<sup>154</sup> Rural Electric

<sup>&</sup>lt;sup>144</sup> Ex 231 Staff Depreciation Manual p 84.

<sup>&</sup>lt;sup>145</sup> AmerenUE witness Loos Tr. Vol. 24 p. 1311 ll. 10-15.

<sup>&</sup>lt;sup>146</sup> Ex 200 Staff Revenue Requirement Cost of Service Report p. 103 ll. 5-6.

<sup>&</sup>lt;sup>147</sup> MIEC witness Dunkel, Tr. Vol. 24 p. 1452 l. 25 to p. 1453 l. 3.

<sup>&</sup>lt;sup>148</sup> MIEC witness Dunkel, Trans Vol. 24, p. 1453 l. 10 to p. 1454 l. 5.

<sup>&</sup>lt;sup>149</sup> MIEC witness Selecky, Trans Vol 24, p.1544 l.L 23 to p. 1545 l. 10.

<sup>&</sup>lt;sup>150</sup> MIEC witness Selecky, Trans Vol. 24, p. 1540 L 15 – p. 1541 L 10.

<sup>&</sup>lt;sup>151</sup> AmerenUE witness Wiedmayer, Tr. Vol. 24 p. 1264 l. 6-8.

<sup>&</sup>lt;sup>152</sup> Staff witness Rice, Tr. Vol. 24 p. 1381 l. 25 to p. 1382 l. 5.

<sup>&</sup>lt;sup>153</sup> Staff witness Rice, Tr. Vol. 24 p. 1380 ll. 16-22.

<sup>&</sup>lt;sup>154</sup> Staff witness Rice, Tr. Vol. 24 p. 1361 ll 16-23, p. 1374 ll. 23-25, p. 1376 ll. 9-20, p. 1377 l. 16 – p. 1378 L 1.

cooperatives do not use the life span technique, nor are depreciation rates for combustion turbine generator sites given life span treatment.<sup>155</sup> There is no set rule about the number of units necessary to determine a preference between the mass property and life span techniques.<sup>156</sup>

Historically, in the unit catalogs for the various utilities - including AmerenUE - all steam production plant sites have been treated as one account.<sup>157</sup> The life span technique requires separate accounts for each account at each plant.<sup>158</sup> With the mass property technique, the average service life that is used is calculated by determining the average life of all units in that universe.<sup>159</sup> Additional allocations at additional levels of detail are necessary to properly conduct a life span study. If those details are not available, they must be assumed. If insufficient effort is put into generating those assumptions, they are nothing more than conjecture. The Company's dates do not reflect consideration of the economic alternatives to plant retirement at the proffered time of retirement.<sup>160</sup> The Company admitts that it didn't develop estimates considering the economic alternatives to plant retirement at the proffered time of retirement to plant retirement at the proffered time of stop plant retirement at the proffered time of retirement.<sup>162</sup>

<sup>&</sup>lt;sup>155</sup> MIEC witness Dunkel, Tr. Vol. 24 p. 1451 l. 25to- p. 1452 l. 16.

<sup>&</sup>lt;sup>156</sup> MIEC witness Dunkel, Tr. Vol. 24 p. 1452 ll. 17 – 24.

<sup>&</sup>lt;sup>157</sup> Staff witness Rice, Tr. Vol. 24 p. 1443 ll. 16 – 25.

<sup>&</sup>lt;sup>158</sup> AmerenUE witness Loos, Tr. Vol. 24 p. 1304 l. 11to p. 1305 l. 4.

<sup>&</sup>lt;sup>159</sup> *Id* at p. 1311 ll. 10 – 15.

<sup>&</sup>lt;sup>160</sup> Staff witness Rice, Tr. Vol. 24 p. 1442 l. 20 to p. 1443 l. 2, p. 1444 ll. 6 – 12 Ex 104; AmerenUE witness

Wiedmayer direct testimony p. 17 ll. 1 – 21; Ex 107 AmerenUE witness Loos direct testimony p 7 l 1 to p. 8 l.5.

<sup>&</sup>lt;sup>161</sup> AmerenUE witness Loos Tr. Vol. 24 p. 1318 ll. 8 – 23.

<sup>&</sup>lt;sup>162</sup> Id.

#### Merits of Studies Presented

Staff

Even before AmerenUE's filing, Staff was aware of the difficulty of calculating future retirement dates.<sup>163</sup> Staff developed average service life estimates for its whole life technique study based on curves fit to actual data.<sup>164</sup> That actual data does include AmerenUE's coal-fired production plant retirement history, though it is admittedly not equivalent to the dollars currently in service.<sup>165</sup> Of the four retired AmerenUE plants studied, three do not yield a plethora of data, although the retirement history associated with the Venice plant is reasonable for purposes of developing an average service life for a mass property technique study.<sup>166</sup> Further, the plants in current operation are expected to be longer-lived than those retired.<sup>167</sup> A danger in estimating a retirement date for a plant is that if the lives used are too short, current customers overpay.<sup>168</sup> AmerenUE was unable to proffer usable dates for purposes of conducting a life span study.<sup>169</sup> In the absence of reliable plant retirement dates, Staff used the mass property technique, which does not require retirement dates. At the end of the day, Staff's mass property generated rates are no worse than the Company's life span generated rates.<sup>170</sup>

#### AmerenUE

The Company admits that proper application of the life span technique involves application of engineering analysis to calculate a likely future retirement date.<sup>171</sup> The results of

- <sup>166</sup> *Id.* at p. 1384 l. 22 to p. 1385 l. 2.
- $^{167}$  Id. at p. 1445 ll. 12 21.
- $^{168}_{160}$  Id. at p. 1444 ll. 13 21.

<sup>&</sup>lt;sup>163</sup> Staff witness Rice Tr. Vol. 24 p. 1441 ll. 13 – 20.

<sup>&</sup>lt;sup>164</sup> *Id.* at, p. 1396 ll. 15 – 19.

<sup>&</sup>lt;sup>165</sup> *Id.* at p. 1384 ll. 4 – 10.

<sup>&</sup>lt;sup>169</sup> MIEC witness Selecky, Tr. Vol. 24 p. 1540 l. 15 to p. 1541 l. 10.

<sup>&</sup>lt;sup>170</sup> Staff witness Rice, Tr. Vol. 24 p. 1443 ll. 3-6.

<sup>&</sup>lt;sup>171</sup> AmerenUE witness Loos, Tr. Vol. 24 p. 1319 ll. 6 – 16.

the engineering analysis, however, are that the current condition of its plants is good,<sup>172</sup> and there are no constraints on the physical plants,<sup>173</sup> it will be economic considerations, not physical limitations, to drive the actual retirement of those plants.<sup>174</sup> All the while, AmerenUE claims its assumed dates are based on "the best evidence that we have available."<sup>175</sup> AmerenUE ignores the inconsistency with an assertion of using the best available evidence, while ignoring what is, admittedly, the most important evidence.

AmerenUE didn't develop estimates of economic considerations, because those estimates would be subject to attack; and there are uncertainties attendant to such estimations.<sup>176</sup> AmerenUE should not be given the benefit of refusing to look at the driver of the plant retirement date calculation, in favor of assuming retirement dates that result in a utility favorable level of annual depreciation expense.

AmerenUE's assumed retirement dates, which drive its annual depreciation expense request in this case, are still uncertain.<sup>177</sup> AmerenUE's requested annual depreciation expense is based on a study that did not look at the costs of replacement generation.<sup>178</sup> The Company did not look at what technology might replace the existing generation,<sup>179</sup> and did not look at the retirement alternatives of plant upgrades or retrofits beyond next 5 years.<sup>180</sup> AmerenUE also did not investigate economic feasibility of selected dates,<sup>181</sup> even though those selected dates were not based on physical limitations.<sup>182</sup>

<sup>&</sup>lt;sup>172</sup> Ex 107 AmerenUE witness Loos direct testimony p. 10 ll. 3-7, Tr. Vol. 24 p. 1278 ll. 7 – 9.

<sup>&</sup>lt;sup>173</sup> AmerenUE witness Loos Tr. Vol. 24 p. 1318 ll. 2 -5.

<sup>&</sup>lt;sup>174</sup> Ex 107 AmerenUE witness Loos direct testimony p. 10 ll. 3-7.

<sup>&</sup>lt;sup>175</sup> AmerenUE witness Wiedmayer, Tr. Vol. 24 p. 1272 ll. 14 – 20.

<sup>&</sup>lt;sup>176</sup> AmerenUE witness Loos Tr. Vol. 24 p. 1318 ll. 8 – 23.

<sup>&</sup>lt;sup>177</sup> MIEC witness Selecky Tr. Vol. 24 p. 1540 l. 15to p. 1541 l. 10.

<sup>&</sup>lt;sup>178</sup> AmerenUE witness Loos, Tr. Vol. 24 p. 1278 ll. 16 – 19.

<sup>&</sup>lt;sup>179</sup> *Id.* at, p. 1278 ll. 20 – 22.

<sup>&</sup>lt;sup>180</sup> *Id.* at, p. 1278 l. 23 to p. 1279 l. 3.

<sup>&</sup>lt;sup>181</sup> *Id.* at p. 1280 l. 24 to p. 1281 l. 11.

<sup>&</sup>lt;sup>182</sup> *Id.* at p. 1280 ll. 6 - 12.

AmerenUE's assumed retirement dates are simply based on the assumption that all plants other than Meramec might receive scrubbers at some point in the future.<sup>183</sup> Mr. Loos then added 20 years to the possible dates for the installation of those scrubbers.<sup>184</sup> The purpose of the 20 years is to account for a recovery period for the capital investment in the scrubbers.<sup>185</sup> Since the Commission had pointed it out in the last case, Mr. Loos added a couple of years to the lives of Labadie and Rush Island, to allow for the orderly replacement of capacity.<sup>186</sup>

The self-serving assumptions underlying AmerenUE's assumed retirement dates are replete. AmerenUE acknowledges that there are no current plans for a second nuclear facility at Callaway, or other plans for replacement energy for Meramec.<sup>187</sup> AmerenUE also acknowledges that Meramec could operate beyond its assumed retirement date.<sup>188</sup> However, AmerenUE insists that it needs the money now to retire Meramec at the time it planned to when justifying its need for Callaway II. It bolsters this claim with an espoused concern for the ratepayers of protecting them from steep increases at the time of Meramec's retirement, alleging that absent their abbreviated depreciation schedules, ratepayers will be paying off Meramec, while being asked to finance its replacement.<sup>189</sup> Apparently, during the course of the hearing the Company forgot that it's not planning any replacement for Meramec,<sup>190</sup> the espoused lack of need for Meramec's capacity, <sup>191</sup> and its admission that Meramec could operated beyond its projected date.<sup>192</sup>

<sup>&</sup>lt;sup>183</sup> Ex 107 Loos direct p 11 L 14 – 18.

<sup>&</sup>lt;sup>184</sup> Ex 107 AmerenUE witness Loos direct testimony p. 12 ll. 1-7, Tr. Vol. 24 p. 1280 ll. 13-19.

<sup>&</sup>lt;sup>185</sup> Ex 107 AmerenUE witness Loos direct testimony p 12 ll. 1-7.

<sup>&</sup>lt;sup>186</sup> *Id.* at p 8 ll. 13 – 15.

<sup>&</sup>lt;sup>187</sup> AmerenUE witness Loos Tr. Vol. 24, p. 1286 ll. 14 – 22.

<sup>&</sup>lt;sup>188</sup> *Id.* at p. 1287 ll. 14 – 20.

 $<sup>^{189}</sup>$ *Id.* at p. 1308 III. 19 – 24.

<sup>&</sup>lt;sup>190</sup> *Id.* at p. 1286 ll. 14 -22.

<sup>&</sup>lt;sup>191</sup> *Id.* at p. 1319 l. 25 to p. 1320 l. 4.

<sup>&</sup>lt;sup>192</sup> *Id.* at, p. 1287 ll. 14 - 20.

Additionally, AmerenUE chose not to examine the practicality of operating Meramec as something other than a coal plant.<sup>193</sup>

AmerenUE's annual depreciation expense request also includes an assumption that the entire site associated with coal-fired steam production plants and hydro generation plants, *en masse*, will be cease to be useful instantaneously and contemporaneously.<sup>194</sup> This is despite the fact that all items on a plant site don't get retired at the same time.<sup>195</sup> While acknowledging that Labadie is a node on its transmission system,<sup>196</sup> AmerenUE's depreciation expert did not investigate whether AmerenUE will abandon those transmission facilities at AmerenUE's assumed retirement date for the Labadie site.<sup>197</sup>

Similarly, AmerenUE did not investigate whether parts of plant sites would survive life as a coal-fired unit. Mr. Birk acknowledged that much of a coal plant and the plant site can, in theory, be utilized in a conversion to a gas-burning unit.<sup>198</sup> In fact, Mr. Birk acknowledged that half of the Meramec site's boilers are already capable of burning natural gas,<sup>199</sup> which does not pose the particulate ash, clinker, sulfur, mercury, carbon dioxide, and other environmental problems associated with coal,<sup>200</sup> the environmental concerns allegedly driving the selected retirement dates. Nonetheless – AmerenUE's annual depreciation expense request is that the entire investment in the entire Meramec site be returned to AmerenUE by 2023.

#### **Conclusion**

The Commission should maintain its practice of basing annual depreciation expense levels on depreciation rates obtained using the mass property technique where, as here, no

<sup>&</sup>lt;sup>193</sup> AmerenUE witness Birk Tr. Vol. 33 p. 2706 ll. 1 - 5.

<sup>&</sup>lt;sup>194</sup> Ex 104 AmerenUE witness Wiedmayer direct testimony, Sch.. JFW-E1.

<sup>&</sup>lt;sup>195</sup> MIEC witness Selecky Tr. Vol. 24 p. 1460 ll. 6 – 15.

<sup>&</sup>lt;sup>196</sup> AmerenUE witness Wiedmayer, Tr. Vol. 24 p. 1265 ll 12 – 14.

 $<sup>^{197}</sup>$ *Id.* at p. 1265 ll. 17 – 23.

<sup>&</sup>lt;sup>198</sup> AmerenUE witness Birk Tr. Vol. 33 p. 2711 ll. 9 – 12.

<sup>&</sup>lt;sup>199</sup> *Id.* at p. 2706 ll. 6-9.

<sup>&</sup>lt;sup>200</sup> *Id.* at p. 2707 l. 2 to p 2709 l.L 5.

reliable estimate of the retirement dates of the facilities are available. AmerenUE acknowledges that its dates SHOULD be driven by economic factors, yet has declined to study what effect economic factors will have on the retirement of its units. Its retirement date for units at Meramec has been shown to be premised on information that is no longer applicable. Its retirement dates for these units - as well as the other steam production units - have been shown to be premised on unduly speculative assumptions, and ignore what is – admittedly – the most important factor: the relative economic sense of continuing the operation of the various units. Finally, AmerenUE's request is based on an assertion that the entire plant site will be retired concurrently with the retirement of the coal-fired production units on that site. Thus, not only are the retirement dates for the units unduly speculative—if not wholly unreliable—the retirement dates for the plant sites are truly worthless.

Staff's study might not be pretty, but it is valid. AmerenUE's study simply is not valid. MIEC's study results in even less depreciation expense than Staff's study, and repeats a prior and acknowledged Staff error from the last case. When there is no good way available to calculate the remaining life of each particular unit, much less of entire plant sites, it's a good idea to stick with the whole life mass property technique. The average service life accounts for some units living longer and some shorter, by lumping all the units and all the plant sites, including previously shut down units, together. AmerenUE's approach of singling the units out by plant site—but not accounting for the plant site separately—first requires a degree of precision that just isn't there, second relies on a faulty assumption that entire plant sites will be retired with the retirement of a given coal-fired unit, and third is based on cash being king.

#### **POWER PLANT MAINTENANCE EXPENSE** (List of Issues No. 6; ~\$14.8 million)

What level of plant maintenance expense for the coal-fired generating units is appropriate for recognition in AmerenUE's revenue requirement?

Staff recommends a normalization of the non-labor maintenance expense for AmerenUE's coal-fired power plants, based on a three-year average of non-labor expenses incurred for the 36 months ending January 31, 2010.<sup>201</sup> Normalization is a prudent way to set the power plant maintenance figure because it takes into account a larger sample size instead of relying on a single, unusually high year that is not representative of a normal level of non-labor maintenance expense. In 2003, AmerenUE made the decision to move from an historic 18-24 month interval for planned outages to a 36-48 month cycle, depending on the unit. AmerenUE moved some units to as much as a seven-year interval between planned outages. The 36-month period utilized by Staff to normalize non-labor coal plant maintenance expense reflects the most current three years of data available, and considers the newly extended planned outage cycle approved by AmerenUE management.<sup>202</sup>

During the test year ending March 31, 2009, AmerenUE incurred total coal-fired power plant maintenance expenses of approximately \$119 million, of which approximately \$75.4 million is non-labor maintenance expense.<sup>203</sup> In the nine historical calendar years referenced in AmerenUE's testimony, AmerenUE's coal-fired power plant maintenance expenses have never exceeded the levels experienced in 2008, a period which encompasses nine months of the test vear.<sup>204</sup>

Reviewing the table on page 16 of Mr. Birk's rebuttal testimony makes clear that 2008 and the test year are outliers and should not be relied upon to set rates. AmerenUE's decision to extend its maintenance cycles decreased the number of outages to only two in 2005, two limited

<sup>&</sup>lt;sup>201</sup> Ex. 242 Staff witness Grissum true-up testimony p. 2 ll. 2-3.

<sup>&</sup>lt;sup>202</sup> Ex. 103 AmerenUE witness Birk rebuttal testimony p. 14.

<sup>&</sup>lt;sup>203</sup> Ex. 242 Staff witness Grissum true-up testimony p. 2 ll. 10-11; Ex. 103 AmerenUE witness Birk rebuttal testimony p. 17 l. 1.

<sup>&</sup>lt;sup>204</sup> Ex. 103 AmerenUE witness Birk rebuttal testimony p. 16; AmerenUE witness Birk Tr. Vol. 24 p. 1043 l. 25 to p. 1044 l. 3.

outages in 2007 and just one outage in 2007.<sup>205</sup> This managerial decision led to an above normal increase in maintenance costs during the April 1, 2008 through March 31, 2009 test year.<sup>206</sup>

Furthermore, AmerenUE seeks to prop-up its test year level by referencing AmerenUE's 2010 budget.<sup>207</sup> The Commission should place no reliance on AmerenUE's budget because the scheduling of outages was manipulated in 2009 based on financial, rather than operational concerns.<sup>208</sup> In the same way that the deferral of maintenance from 2005 through 2007 resulted in abnormal test year expenses, the deferral of maintenance in 2009 results in abnormal coal-fired power plant maintenance expense in AmerenUE's 2010 budget.<sup>209</sup>

As is demonstrated by recent history and confirmed by Mr. Birk on the witness stand, extensions of planned outage cycles and maintenance deferrals are entirely within AmerenUE's discretion.<sup>210</sup> It is clear that AmerenUE has the flexibility to lessen the economic impacts of performing maintenance in a single year such as it did in 2009 due to economic conditions or for other reasons. What AmerenUE has failed to explain, however, is why it is appropriate to establish rates based on a single year in which it incurred abnormally high levels of maintenance expense or why ratepayers should be asked to pay for this higher level of expense through higher rates, even though an average of historical levels and AmerenUE's budgeted levels for this expense in the immediate future years show that non-labor coal-fired power plant maintenance expense will be below the test year level of this expense.

Staff's true-up testimony illustrates the abnormal level of non-labor coal-fired power plant maintenance of \$75.4 million that existed during the test year as compared to the trued-up

<sup>&</sup>lt;sup>205</sup> Ex. 103 AmerenUE witness Birk rebuttal testimony p. 16.

<sup>&</sup>lt;sup>206</sup> Ex. 224 Staff witness Grissum surrebuttal testimony p. 6.

<sup>&</sup>lt;sup>207</sup> Ex. 103 AmerenUE witness Birk rebuttal testimony p. 17, ll. 1-2.

<sup>&</sup>lt;sup>208</sup> *Id.* at, p. 16, l. 6. The witness discusses deferring maintenance due to the global financial crisis.

<sup>&</sup>lt;sup>209</sup> Ex. 224 Staff witness Grissum surrebuttal testimony p. 6.

<sup>&</sup>lt;sup>210</sup> *Id.* at p. 6 l. 20 to p. 7 l. 2.; *see also* Staff witness Grissum Tr.Vol. 24 p. 1073 l. 13 to p. 1074 l. 7.

three-year average of \$60.4 million. The Commission should be wary of relying on AmerenUE's budgeted levels of \$66.4 million, \$69.6 million and \$64.7 million for power plant maintenance expense in 2010, 2011 and 2010, respectively. However, even the highest of these amounts is almost \$6 million less than what AmerenUE incurred in the test year, and an average of these amounts would require a reduction to the test year expense of \$8.5 million.

Staff's proposal to normalize non-labor maintenance expense over a three-year period ending with the January 31, 2010 true-up cut-off date takes into account a broader range of factors by accounting for AmerenUE's transition in planned outage cycles as well as using the most current data reflecting actual expenses AmerenUE has incurred for non-labor plant maintenance over the last three years. Normalization of non-labor coal-fired power plant maintenance expenses also smooths the effect of fluctuations in those expenses from year-to-year that occur if AmerenUE's management team chooses to again defer plant maintenance or as planned outage cycles expand or contract at AmerenUE's discretion.

**<u>NUCLEAR FUEL</u>** (List of Issues No. 8; ~\$11 million)

#### **Callaway Fuel/Fuel Modeling Issues**

What is the appropriate nuclear fuel price input for the production cost model?

The primary issue regarding nuclear fuel centers on whether or not AmerenUE can include fuel in its rates that is currently being loaded into the Callaway nuclear reactor beyond the true-up cut-off date. The true-up cut-off date established and agreed to by the parties in this rate proceeding is January 31, 2010. Therefore, the appropriate price to use as the nuclear fuel input for the production cost model is the trued-up fifteen-month average cost of the nuclear fuel actually burned by AmerenUE at Callaway during the period beginning after the most current nuclear fuel reload in October 2008 through January 2010.

The Callaway nuclear plant is unique among AmerenUE's generating units because it undergoes a refueling process every 18 months. This is a key distinction as compared to AmerenUE's other generating units which use fuel sources such as coal. Coal deliveries reflecting the new contract prices that took effect on January 1, 2010, began in January 2010. Thus, coal reflecting that price increase is available to be burned as fuel by the true-up cut-off date of January 31, 2010. The new nuclear fuel, on the other hand, cannot be used for generating electricity (used and useful) until the new fuel assemblies are physically loaded into the reactor. Until Callaway is brought back into service following this reload, it cannot generate electricity using fuel that reflects the new nuclear fuel price. Therefore, until the Callaway unit is brought back into service following the reload currently underway at this facility,—which will be well after the true-up cut-ff date of January 31, 2010, AmerenUE cannot generate electricity at this generating unit that reflects the new nuclear fuel price.

AmerenUE has selectively proposed a date that will reflect nuclear fuel burned after the true-up cut-off date, while all other items in its cost of service reflect events that have occurred by the January 31, 2010 true-up cut-off deadline. AmerenUE argues that because the Commission has included costs outside the true-up cut-off date in a previous rate case, Case No. ER-2008-0318, it should do the same here.<sup>211</sup> The date AmerenUE proposes to use for including costs beyond the true-up cut off date in this case, however, is over three times the length of time the Commission allowed in the previous rate case. The Callaway generating unit is not scheduled to be placed back in service from the outage in which it will load the new fuel assemblies until late May or early June 2010, approximately four months after the Commission ordered true-up cut-off date.

<sup>&</sup>lt;sup>211</sup> AmerenUE opening statement Tr. Vol. 32 p. 2641, ll. 11-17.

With the lone exception of AmerenUE's proposal on nuclear fuel, no other party has suggested the inclusion of any item impacting AmerenUE's cost of service beyond the ordered true-up cut-off date. AmerenUE has made this proposal despite the fact that an appropriate relationship between expenses, revenues and investment was established by the January 31, 2010 true-up cut-off date. Significant changes, previously estimated, were trued-up for the period from March 31, 2009 through January 31, 2010. Among these changes were increases in AmerenUE's cost of coal, increases in plant investment and an increase in customer growth. This relationship will surely be skewed by the recognition of a single item of the cost of service, nuclear fuel, four months beyond the true-up cut-off date.

The appropriate place to address AmerenUE's increase in nuclear fuel cost beyond the true-up cut-off date is in its fuel adjustment clause (FAC), which the Commission approved in AmerenUE's last rate case.<sup>212</sup> The FAC will not only capture the increase in AmerenUE's nuclear fuel cost, but also increases and decreases in AmerenUE's other fuel costs and its off-system sales. Any increase in the level of off-system sales and any decrease in the costs of the other fuel components will mitigate the increased nuclear fuel cost.

The Commission should not allow AmerenUE to lead it down a path that allows utilities to include costs increasingly further beyond the true-up date in each subsequent rate case. Doing so would set an undesirable precedent in future rate cases, diminish the significance of a true-up cut-off date, and disrupt the relationship between revenues, expenses and investment.

**STORM EXPENSE** (List of Issues No. 5; ~\$3.2 million)

i. What level of storm expense is appropriate for recognition in AmerenUE's revenue requirement?

<sup>&</sup>lt;sup>212</sup> In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area, Case No. ER-2008-0318.

The appropriate level of storm expense to recognize in AmerenUE's revenue requirement is \$6.4 million.

ii. Should a tracker be implemented for storm expense that varies from the level of storm expense the Commission recognizes in AmerenUE's revenue requirement?

No.

iii. Should the amount incurred during the test-year, in excess of the level of storm expense that is appropriate for recognition in AmerenUE's revenue requirement be amortized?

Yes.

The Commission should deny AmerenUE's request for a storm tracker, set the level of storm expense at \$6.4 million, and amortize the test-year level above this amount over the next five years. The contentions between parties are whether or not AmerenUE should be granted a storm tracker and what should be the base level for storm expenses that is included in AmerenUE's general revenue requirement. All parties agree that the storm expense level that is the subject of disagreement is limited to operation and maintenance (O&M) expenses, and excludes internal labor costs.

AmerenUE already has the ability to recover extraordinary costs it incurs due to a storm by applying to the Commission for an Accounting Authority Order (AAO). Staff considers an event that exceeds five percent of a utility's net operating income to be extraordinary.<sup>213</sup> The middle ground for recovery of costs associated with an extraordinary storm is an AAO.<sup>214</sup> Staff supports the use of an AAO over a storm tracker because the analysis Staff auditors conduct is more stringent than when a number goes into a tracker that is already established.<sup>215</sup> MIEC witness Mr. Meyer agreed stating that in his opinion a tracker gives a preapproval of

<sup>&</sup>lt;sup>213</sup> Staff witness Rackers Tr. Vol. 26 p. 1660 l. 4.

<sup>&</sup>lt;sup>214</sup> *Id.* at pp. 1662-63.

<sup>&</sup>lt;sup>215</sup> *Id* at pp. 1668-69.

expenditures, whereas an AAO requires a review of all relevant factors.<sup>216</sup> The more appropriate regulatory approach to dealing with extraordinary storms is an AAO, in which all relevant factors are considered.<sup>217</sup> Staff believes that an AAO is the mechanism the Commission should use to handle extraordinary expenses such as those AmerenUE incurs from a storm that requires restoration in excess of the base amount set in its revenue requirement.

The Commission has the power to issue an AAO to a utility company for treatment for a transaction or group of transactions other than that prescribed by the Uniform System of Accounts.<sup>218</sup> Section 393.140(8), RSMo 2000 provides that the Commission shall "have power to examine the accounts, books, contracts, records, documents and papers of any such corporation or person, and have power, after hearing, to prescribe by order the accounts in which particular outlays and receipts shall be entered, charged or credited."<sup>219</sup> An AAO benefits the utility by deferring items booked as a regulatory asset rather than as an expense, thus improving the utility's financial situation during the deferral period.<sup>220</sup> The recovery of the regulatory asset is then considered in the utility's next general rate case. Generally, if the Commission allows recovery of the regulatory asset, it uses a five-year amortization period, *i.e.*, the amount included in the utility's revenue requirement is one-fifth of the amount in the asset and that amount is only available for inclusion in the revenue requirement for five years.

AAO's are often sought to defer costs where a utility has undertaken an unusually large

<sup>&</sup>lt;sup>216</sup> *Id.* at p. 1639, ll. 14-23.

<sup>&</sup>lt;sup>217</sup> See Ex.401 MIEC witness Meyer surrebuttal testimony, p. 18, ll. 8-16.

<sup>&</sup>lt;sup>218</sup> In the Matter of Missouri Public Service Co., 1 Mo.P.S.C.3d 200, 202 (Dec. 20, 1991) ("Sibley").

<sup>&</sup>lt;sup>219</sup> § 393.140(8), RSMo 2000.

<sup>&</sup>lt;sup>220</sup> *Sibley* at 202.

construction project<sup>221</sup> to mitigate regulatory lag.<sup>222</sup> The new asset can be added to rate base only through a traditional rate case, an eleven-month-long process in Missouri, and only after the asset fully operational and used for service.<sup>223</sup> The Commission has also granted AAOs where utilities have incurred expenses due to "Acts of God," such as ice storms;<sup>224</sup> to facilitate compliance with changing statutes or regulations, such as the Commission's Cold Weather Rule,<sup>225</sup> the Commission's Gas Safety Rules,<sup>226</sup> or a new state statute requiring an accounting change with respect to employee benefits;<sup>227</sup> and where expenses were incurred in preparing company computer equipment for the year 2000.<sup>228</sup>

The Commission previously stated "the cost incurred as a result of the flood of 1993 was a natural disaster, an "Act of God", and the expenditures were not intended to produce any benefit other than restoring the system to its pre-flood operating condition. The burden of "Acts of God" should not be borne solely by the ratepayers."<sup>229</sup> As a result, the amount deferred though an AAO, related to an "Act of God," does not include carrying costs and is not included in the utility's rate base.

AAOs are not useful merely for the mitigation of regulatory lag, although that is a proper

purpose of an AAO, as the Missouri Court of Appeals has made clear:

The Commission has the regulatory authority to grant a form of relief to the utility in the form of an accounting technique, an Accounting Authority Order which allows the utility to defer and capitalize certain expenses until

<sup>&</sup>lt;sup>221</sup> See St. ex rel. Missouri Office of the Public Counsel v. Public Service Commission of Missouri, 858 S.W.2d 812 (Mo. App., W.D. 1993).

<sup>&</sup>lt;sup>222</sup> Regulatory lag is "the lapse of time between a change in revenue requirement and the reflection of that change in rates." *In the Matter of St. Louis County Water Company*, Case No. WR-96-263 (*Report and Order*, issued December 31, 1996), at p. 8.

<sup>&</sup>lt;sup>223</sup> §393.135, RSMo 2000.

<sup>&</sup>lt;sup>224</sup> In the Matter of Kansas City Power and Light Co., 11 Mo.P.S.C.3d 419 (2002).

<sup>&</sup>lt;sup>225</sup> In the Matter of Missouri Gas Energy, 11 Mo.P.S.C.3d 317 (2002).

<sup>&</sup>lt;sup>226</sup> In the Matter of Missouri Gas Energy, 3 Mo.P.S.C.3d 201 (1994).

<sup>&</sup>lt;sup>227</sup> Id.

<sup>&</sup>lt;sup>228</sup> In the Matter of Missouri Gas Energy, 9 Mo.P.S.C.3d 37 (2000).

<sup>&</sup>lt;sup>229</sup> WR-95-145 Report and Order.

the time it files its next rate case. The AAO technique protects the utility from earnings shortfalls and softens the blow which results from extraordinary construction programs.<sup>230</sup> (internal citation omitted) The AAO is necessary to enable utilities to cope with "extraordinary losses":

Periodically a utility will sustain an unusual or nonrecurring property loss which will not be covered by depreciation, insurance, or other provision. Examples of these losses include storm damage and other acts of God, regulatory requirements, and technological changes. With proper application to the regulatory commission, a utility is allowed to amortize the loss over a period of time. This procedure, while somewhat inconsistent with generally accepted accounting principles, allows the extraordinary item to be spread over a longer period of time, thus reducing the possibility of wide fluctuations in periodic income caused by the nonrecurring item. Since the uniform systems do not provide for the creation of profit might be open to question – recovery of the loss is always after the fact.<sup>231</sup>

AAO's balance the interest of the ratepayers and the shareholders, as it best serves the

public interest. The balancing of interests is fundamental to the Commission's statutory duty: "a fair administration of the act is mandatory. When we say 'fair,' we mean fair to the public and fair to the investors."<sup>232</sup> Storm expenses incurred outside the test year have been traditionally captured in an AAO.<sup>233</sup> AmerenUE has utilized an AAO to permit recovery of costs it incurred due to an extraordinary storm.<sup>234</sup> Mr. Rackers pointed out in his rebuttal testimony that "a problem with AmerenUE's (proposed) tracker is that it uses one procedure to handle all storm costs, both normal and extraordinary."<sup>235</sup> An AAO will allow the Commission to examine and consider recovery of the costs of a truly extraordinary storm that occurs between rate cases, rather than simply allowing AmerenUE to spend above and beyond its base level for even

<sup>&</sup>lt;sup>230</sup> Missouri Gas Energy v. Public Service Commission, 978 S.W.2d 434, 436 (Mo. App. 1998).

<sup>&</sup>lt;sup>231</sup> J.E. Suelflow, *Public Utility Accounting: Theory & Application* (Michigan State University Public Utilities Studies) 209 (1973) (internal footnote omitted).

<sup>&</sup>lt;sup>232</sup> State ex. rel. Washington University et al. v. Public Service Commission et al., 272 S.W.971, 973 (en banc 1925).

<sup>&</sup>lt;sup>233</sup> Ex. 110 AmerenUE witness Wakeman surrebuttal testimony p.6 ll. 3-7.

<sup>&</sup>lt;sup>234</sup> Ex. 202 Staff witness Rackers rebuttal testimony p. 2, l. 11.

<sup>&</sup>lt;sup>235</sup> Id. at p. 3, ll. 2-3.

ordinary storms then accumulate those costs in a single issue tracker predisposed for recovery in a future rate case.

AmerenUE has not shown that using a tracker to address cost from storms will diminish or improve its financial ratings. It will only allow AmerenUE to have easier access to receiving more cash to the detriment of its ratepayers. AmerenUE asserts that having a storm tracker will encourage it to spend promptly and freely when a storm occurs. Such an unrestrained attitude should not be promoted. While restoring service is imperative, it must also be done prudently.<sup>236</sup>

AmerenUE acknowledges that it can continue to recover additional expenses incurred from a storm through an AAO.<sup>237</sup> However, AmerenUE is attempting to sway this Commission by the use of self aggrandizements—by citing an award it received for restoring service lost due to storms.<sup>238</sup> However, its own witness Mr. Wakeman, states that while AmerenUE should have a storm tracker, that it should have one is not necessarily because it performs well during storm restoration efforts.<sup>239</sup>

AmerenUE claims that a storm tracker is more appropriate than an AAO due to the effect of regulatory lag.<sup>240</sup> However, regulatory lag is inevitable with either an AAO or tracker. Rates do not change outside of a rate case simply because a utility has a tracker.<sup>241</sup> With either an AAO or a tracker, capital costs associated with extraordinary storms costs will not be included in rate base, and any recognition of the storm costs incurred through an amortization of the deferred

<sup>&</sup>lt;sup>236</sup> AmerenUE witness Wakeman, Tr. Vol. 26, p.1575 ll. 8-13.

<sup>&</sup>lt;sup>237</sup> *Id.* at p. 1576, ln 14.

<sup>&</sup>lt;sup>238</sup> See Ex. 110 AmerenUE witness Wakeman surrebuttal testimony p. 6 ll. 20-22.

 <sup>&</sup>lt;sup>239</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1578 ll. 9-20, p. 1580, lll. 3-13, p. 1626 l. 18; *see* Ex. 109
AmerenUE witness Wakeman rebuttal testimony; Ex. 110 AmerenUE witness Wakeman surrebuttal testimony.
<sup>240</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1578 ll. 20-23.

<sup>&</sup>lt;sup>241</sup> *Id.* at. 1614, ll. 14-23.

amounts will not be included in the utility's cost of service until the resolution of the next rate case.<sup>242</sup>

AmerenUE is seeking a baseline of \$10.4 million for inclusion in its revenue requirement /cost of service.<sup>243</sup> Staff is proposing \$6.4 million. MIEC is recommending \$5.2 million. Staff's number is more appropriate because Staff does not automatically set the baseline level to the test year amount, like AmerenUE is requesting.<sup>244</sup> Staff will use the test year storm costs in determining the revenue requirement only if the test year storm costs amount is representative of a reasonable ongoing level.<sup>245</sup> Here the test year amount is not the appropriate level upon which to set the baseline storm cost for rates.<sup>246</sup> The test year contains the cost of a storm that was described by AmerenUE witness Wakeman (who adopted the prefiled testimony of AmerenUE witness Zdellar) using the terms "unprecedented" and "devastation." Mr. Wakeman also points out that Governor Nixon declared a State Of Emergency for the area affected by this storm. Yet AmerenUE has chosen the test year level, which includes such a storm, as the appropriate amount on which to establish rates and use as a base amount for a tracker.

While Mr. Wakeman presented evidence of the costs AmerenUE has incurred for storms over the past six years, it is important to note that the majority of those costs are capital investments that are already included in rate base, as trued-up through January 31, 2010.<sup>247</sup> As stated earlier, the costs included in this issue are O&M expenses, excluding internal labor. The chart Mr. Wakeman provided in his testimony also appears to show significant cost associated

<sup>&</sup>lt;sup>242</sup> Ex. 157 AmerenUE witness Wakeman direct testimony by adoption of prefiled direct testimony of Ronald C. Zdellar p. 19 ll. 12-16.

<sup>&</sup>lt;sup>243</sup> *Id.* at p. 21, 1.. 5.

<sup>&</sup>lt;sup>244</sup> Staff witness Rackers Tr. Vol. 26 p. 1649 ll. 2-6.

<sup>&</sup>lt;sup>245</sup> Id.

<sup>&</sup>lt;sup>246</sup> Id. atp. 1649 l. 11.

<sup>&</sup>lt;sup>247</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1620, ll. 1-25. *See* Ex. 109, AmerenUE witness Wakeman rebuttal testimony pg. 6.

with recent storms. However, if the chart is extended over a greater period of time, the storms from 2006 and 2007 would be outliers.<sup>248</sup>

Furthermore, AmerenUE witness Mr. Wakeman also testified, that all things being equal, AmerenUE should notice a reduction in storm expenses due to its increased vegetation management and infrastructure inspection programs.<sup>249</sup> Mr. Wakeman further noted that there is a correlation between an increase in vegetation management and infrastructure inspection expenses and a reduction in storm restoration expenses.<sup>250</sup> By expanding its vegetation management and infrastructure inspection programs, thereby increasing the costs of those programs, a utility has the ability to reduce the amount of damage associated with an extraordinary storm.<sup>251</sup> When there is a major outage, a storm tracker is not going to get the lights on faster. AmerenUE still has to spend prudently when restoring its system after a storm. AmerenUE is not going to delay storm restoration efforts if it is not awarded a tracker.<sup>252</sup>

All things being equal, the cost of storm damage restoration should decrease with increases in AmerenUE's vegetation management and infrastructure inspection programs.<sup>253</sup> While AmerenUE does not have control over when and where a storm occurs, it does have some control over the damage it incurs. If AmerenUE continues to have very robust vegetation management and infrastructure inspection programs, the cost associated with storm damage should decrease, thus lowering storm restoration expense.<sup>254</sup>

<sup>&</sup>lt;sup>248</sup> Staff witness Rackers Tr. Vol. 26 p. 1675 l. 17; See Ex. 203 Staff witness Rackers surrebuttal testimony p. 5 ll. 16-19.

<sup>&</sup>lt;sup>249</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1581 l. 19.

<sup>&</sup>lt;sup>250</sup> *Id*. at p.1582, ln 7.

<sup>&</sup>lt;sup>251</sup> *Id.* at p. 1587, ln 17.

<sup>&</sup>lt;sup>252</sup> *Id.* at p. 1595, ln 11-20.

<sup>&</sup>lt;sup>253</sup> Staff witness Rackers Tr. Vol. 26 p. 1648, ll. 12-19.

<sup>&</sup>lt;sup>254</sup> *Id.* at p. 1650 ll. 17-20.

The Commission should not be enticed by AmerenUE's promise to return to ratepayers any over collection resulting from the use of a storm tracker.<sup>255</sup> As discussed later in this brief, AmerenUE has not followed-through with a proposal to address all of the over-collections it admits it has reaped as a result of the operation of its tracker for vegetation management and infrastructure inspections the Commission ordered in AmerenUE's last rate case.<sup>256</sup> Staff proposes that the Commission normalize test year non-labor related storm costs based on a four-year average of historic non-labor related storm costs for all storms that occurred between July 1, 2005 and June 30, 2009.<sup>257</sup> Staff excluded all costs related to storms that occurred between July 1, 2006 and December 31, 2006, from its four-year average.<sup>258</sup>

The Commission should deny AmerenUE's request for a storm tracker. Further, it should set the base level for storm expenses to \$6.4 million dollars, and amortize the amount AmerenUE incurred during the test-year above this level over a five year period. The treatment of cost incurred from future truly extraordinary storms is most appropriately addressed through the use of an Accounting Authority Order.

# **VEGETATION MANAGEMENT EXPENSE** (List of Issues No. 3; ~\$3.3 million)

i. What level of vegetation management expense is appropriate for recognition in AmerenUE's revenue requirement?

The actual level of vegetation management expense AmerenUE incurred during the test year, as trued-up through January 31, 2010—\$50.4 million.

ii. Should a tracker continue to be implemented for AmerenUE's vegetation management expense that varies from the level of vegetation management expense the Commission recognizes in AmerenUE's revenue requirement?

No. The tracker for vegetation management expense should be discontinued.

<sup>&</sup>lt;sup>255</sup> Ex. 110 AmerenUE witness Wakeman surrebuttal testimony p. 8 ll. 15-17.

<sup>&</sup>lt;sup>256</sup> See Infra Vegetation Management Expense and Infrastructure Inspection Expense

<sup>&</sup>lt;sup>257</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 89.

<sup>&</sup>lt;sup>258</sup> Id.

## **INFRASTRUCTURE INSPECTIONS EXPENSE** (List of Issues No. 4; ~\$1.3 million)

i. What level of infrastructure inspection expense is appropriate for recognition in AmerenUE's revenue requirement?

The actual level of infrastructure inspection expense AmerenUE incurred during the test year, as trued-up through January 31, 2010—\$7.6 million.

ii. Should a tracker continue to be implemented for AmerenUE's infrastructure inspection expense that varies from the level of infrastructure inspection expense the Commission recognizes in AmerenUE's revenue requirement?

The Commission should discontinue AmerenUE's tracking mechanism for both its vegetation management and infrastructure inspection programs established in its last rate case, Case No. ER-2008-0318. Further, the Commission should set the level to be included in AmerenUE's cost of service based upon the test year amount, trued-up through January 31, 2010 at \$50.4 million for vegetation management and \$7.6 million for infrastructure inspections. Since vegetation management and infrastructure inspections were addressed simultaneously at the evidentiary hearing and are interrelated, Staff will address both issues concurrently.

The Commission promulgated rules entitled, *Electrical Corporation Infrastructure Standards*<sup>259</sup> and *Electrical Corporation Vegetation Management Standards and Reporting Requirements*,<sup>260</sup> which went into effect on June 30, 2008, designed to compel electric utilities to increase their standards of maintaining their electric distribution facilities in efforts to enhance the reliability of electric service to their customers.<sup>261</sup> These rules require electric utilities, including AmerenUE to inspect and replace old damaged infrastructure, and to aggressively trim

<sup>&</sup>lt;sup>259</sup> Commission Rule 4 CSR 240-23.020.

<sup>&</sup>lt;sup>260</sup> Commission Rule 4 CSR 240-23.030.

<sup>&</sup>lt;sup>261</sup> See In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs to Increase Its Annual Revenue for Electric Service, *Report and Order*, Case No. ER-2008-0318, 32 (Effective Feb. 6, 2009) ("ER-2008-0318 *Report and Order*").

tree branches and other vegetation that encroaches on transmission and distribution lines.<sup>262</sup> The Commission included a provision in both 4 CSR 240-23.020 and 4 CSR 240-23.030, which addresses how the utility can request recovery of the costs associated with implementation of the rule.<sup>263</sup>

The Commission stated in Rule 4 CSR 240-23.030(10) that an electric utility may seek accounting authority to defer, for possible recovery in its next general rate case filed after the effective date of the rule, vegetation management costs it incurs in complying with the rule that exceed the amount of those costs that were included in setting its current rates or, if otherwise unidentifiable, the amount of those costs reflected in the appropriate uniform system of accounts for vegetation management on the utility's books for the test year (as updated) from the utility's last rate case.<sup>264</sup> The Commission has a similar provision for infrastructure inspections and corrective actions in Rule 4 CSR 240-23.020(4).<sup>265</sup> However, the rules each specifically state how the utility can track the dollars associated with vegetation management and infrastructure inspection, **up until the utility's next rate case**.<sup>266</sup> Commission Rules 4 CSR 240-23.020(4) and 4 CSR 240-23.030(10) each state that ". . . [t]he commission will address the ratemaking of any costs deferred under these accounting authorizations at the time the electrical corporation seeks ratemaking in a general rate case."

The Commission granted AmerenUE a tracker for both vegetation management expenses and infrastructure inspection expenses in its last rate case, Case No. ER-2008-0318.<sup>267</sup> In its *Report and Order* in that case the Commission stated:

<sup>&</sup>lt;sup>262</sup> See ER-2008-0318 Report and Order at 32.

<sup>&</sup>lt;sup>263</sup> See Commission Rule 4 CSR 240-23.020(4) and Commission Rule 4 CSR 240-23-030(10).

<sup>&</sup>lt;sup>264</sup> Commission Rule 4 CSR 240-23.030(10).

<sup>&</sup>lt;sup>265</sup> Commission Rule 4 CSR 240-23.020(4).

<sup>&</sup>lt;sup>266</sup> See Commission Rule 4 CSR 240-23.020(4) and Commission Rule 4 CSR 240-23-030(10).

<sup>&</sup>lt;sup>267</sup> See ER-2008-0318 Report and Order.

Any reduction in outage related expenses will, of course, be reflected in a reduced cost of service in AmerenUE's next rate case. In the same rate case, the Commission will consider any adjustments, up or down, that result from application of the tracking mechanism the Commission will approve in this case. Thus, balance will be maintained and ratepayers will not be harmed by operation of the tracking mechanism.<sup>268</sup>

However, although AmerenUE admits over-collecting by \$5 million through February 28, 2010, as a result of the operation of the tracking mechanism, it has not made a proposal in this case to deal with all of the over-collection. After subtracting the incremental amount spent to comply with the Commission's new rules from October 1, 2008 through February 28, 2009, there is a remaining over-collection of \$3.4 million.<sup>269</sup> AmerenUE has made no proposal in this or any other case to address this over-collection as was contemplated by AmerenUE and the Commission in AmerenUE's last rate case.<sup>270</sup> When questioned about AmerenUE's intention with regard to the remaining over-collection, AmerenUE witness David Wakeman agreed that the over-collection "could be returned to ratepayers as an over-collection," but he did not endorse such proposal to do so.<sup>271</sup> Ratepayers were, and continue to be, harmed by this over-collection as a result of the operation of AmerenUE's vegetation management and infrastructure tracking mechanism.

When the Commission approved AmerenUE's tracking devices in its last rate case the Commission stated that "the tracking mechanism shall operate until new rates are established in AmerenUE's **next rate case.**"<sup>272</sup> That time is now, in this rate case. Staff is recommending to the Commission that it terminate AmerenUE's tracking mechanism, set rates on traditional ratemaking principles, and not use forecasted numbers to establish rates.

<sup>&</sup>lt;sup>268</sup> See ER-2008-0318 Report and Order at 42.

<sup>&</sup>lt;sup>269</sup> Ex. 240 Update to Vegetation Management Numbers.

<sup>&</sup>lt;sup>270</sup> See ER-2008-0318 Report and Order at 42.

<sup>&</sup>lt;sup>271</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1722.

<sup>&</sup>lt;sup>272</sup> See ER-2008-0318 Report and Order (emphasis added).

AmerenUE began complying with the Commission vegetation management and infrastructure inspection rules before they became effective.<sup>273</sup> AmerenUE efforts began in January 2008; however, the Chapter 23 rules did not go into effect until June 30, 2008. AmerenUE is currently in compliance with the rules and timely moving through the specific requirements of the rules.<sup>274</sup> AmerenUE's programs have been in place for over a year,<sup>275</sup> and by the time, the tariff sheets from this rate case go into effect, AmerenUE will have completed vegetation management and infrastructure inspections of approximately 60% of its urban cycle and 50% of its rural cycle.<sup>276</sup> Commission Rule 4 CSR 240-23.040(9)(A)2 provides that "each electrical corporation shall perform vegetation management in accordance with this rule as follows . . . on no less than forty percent (40%) of its total urban distribution miles by twenty-four (24) month anniversary of the effective date of this rule, and on no less than forty percent (40%) of its total rural distribution miles by the thirty-six (36) month anniversary of the effective date of this rule."

AmerenUE's vegetation management program has remained constant for at least the last two years and has undergone significant changes over the last 5 years.<sup>277</sup> AmerenUE's approach to tree trimming is a methodical approach to trimming the entire circuit, instead of focusing on hot spots.<sup>278</sup> Its' improved efforts with tree trimming have resulted in fewer customer complaints.<sup>279</sup> AmerenUE's programs have reached a level of maturity where a tracker is no

<sup>&</sup>lt;sup>273</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1716, ll. 16-17.

<sup>&</sup>lt;sup>274</sup> *Id.* at p. 1728, ll. 3-5.

<sup>&</sup>lt;sup>275</sup> Staff witness Beck Tr. Vol. 26 p. 1769, l. 25.

<sup>&</sup>lt;sup>276</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1726, ll 9-10, p. 1736 l. 3.

<sup>&</sup>lt;sup>277</sup> Ex. 209 Staff witness Beck rebuttal testimony p. 2.

<sup>&</sup>lt;sup>278</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1711, ll. 8, 20-24. Hot spotting is "when you find a particular area of the circuit that has abnormal tree growth or another issue that needs to be addressed with respect to vegetation management." *Id.* at ll 16-19.

<sup>&</sup>lt;sup>279</sup> *Id.* at p. 1712, ll. 14-15.

longer necessary.<sup>280</sup> The experience of the past two years of complying with the Commission's rules is a good indicator of the amount for vegetation management and infrastructure inspection programs to include in AmerenUE's cost of service in this case.<sup>281</sup> AmerenUE will still comply with the Commission rules if its tracker mechanisms are terminated.<sup>282</sup>

AmerenUE is proposing a decrease in the base level against which its actual costs are to be tracked for vegetation management to \$53.7 million and a decrease in the base level against which its actual costs for infrastructure inspections are to be tracked to \$8.9 million.<sup>283</sup> AmerenUE is requesting \$4.5 million more than it spent in 2008, and \$3.3 million more that it spent during the twelve months ending January 31, 2010.<sup>284</sup> The requested amounts are based on budgeted expenditures for the years 2010 and 2011.<sup>285</sup> Although there is no provision for addressing inflation in the Commission's rule, these budgeted numbers for vegetation management and infrastructure inspections include inflation.<sup>286</sup> AmerenUE is claiming it relied on the Commission's previous orders in continuing to pursue trackers for its vegetation management and infrastructure inspection programs.<sup>287</sup> However, a careful reading of the *Report and Order* in AmerenUE's last rate case, Case No. ER-2008-0318 reveals the Commission stated that the tracker would be in place until AmerenUE's next rate case, not indefinitely.

The use of forecasted numbers set forth by AmerenUE is inappropriate because they are not known and measurable. More specifically, in AmerenUE's last rate case, Case No. ER-2008-0318, budgeted numbers were used to set the amounts for vegetation management and infrastructure inspections costs in AmerenUE's revenue requirement and in the tracker base, and

<sup>&</sup>lt;sup>280</sup> Staff witness Rackers Tr. Vol. 26 p. 1780 ll. 17-18.

<sup>&</sup>lt;sup>281</sup> Ex. 209 Staff witness Beck rebuttal testimony p. 2.

<sup>&</sup>lt;sup>282</sup>AmerenUE witness Wakeman Tr. Vol. 26 p. 1731 l. 24.

<sup>&</sup>lt;sup>283</sup> Ex. 109 AmerenUE witness Wakeman rebuttal testimony p. 10 ll. 17-18.

<sup>&</sup>lt;sup>284</sup> AmerenUE witness Wakeman Tr. Vol. 26 pp. 1730-31.

<sup>&</sup>lt;sup>285</sup> Ex. 154 AmerenUE witness Weiss direct testimony p. 39.

<sup>&</sup>lt;sup>286</sup> AmerenUE witness Wakeman Tr. Vol. 26 p. 1729 l. 9.

<sup>&</sup>lt;sup>287</sup> Ex. 109 AmerenUE witness Wakeman rebuttal testimony p. 121. 15

AmerenUE did not spend those amounts. AmerenUE over-collected more than \$5 million dollars from its ratepayers through the use of trackers for its vegetation management and infrastructure inspections programs.<sup>288</sup> It is unjust and unreasonable for AmerenUE's ratepayers to front the cost associated with AmerenUE's vegetation management and infrastructure inspections programs when AmerenUE's ratepayers have overpaid for the previous years. Traditional ratemaking principles and actual expenditures should be used to establish the cost of service for these programs.

AmerenUE claims that it does not have enough historical data to understand the costs involved for either its vegetation management or its infrastructure inspections programs.<sup>289</sup> However, AmerenUE's witness could not identify how much data he believed was necessary before AmerenUE would agree the tracker should be eliminated.<sup>290</sup> Staff's experts and MIEC's expert are of the belief that there already is enough historical data on the costs of these programs to use those costs to set rates through traditional ratemaking principles.<sup>291</sup>

AmerenUE's contracts for vegetation management and infrastructure inspections are up for renegotiation in December 2010.<sup>292</sup> AmerenUE has a fiduciary duty to its shareholders to maximize their return on investment. Staff believes if AmerenUE's trackers are terminated, it would provide a powerful incentive to AmerenUE to negotiate the best contracts possible with the outside contractors it uses to perform work required by both the vegetation management and infrastructure inspection programs.<sup>293</sup>

<sup>&</sup>lt;sup>288</sup> AmerenUE witness Wakeman Tr. Vol. 26, p. 1721, ln 18.

<sup>&</sup>lt;sup>289</sup> *Id.* at p. 1715, ll. 22-25.

<sup>&</sup>lt;sup>290</sup> *Id.* at p. 1718, ln 3.

<sup>&</sup>lt;sup>291</sup> MIEC witness Meyer Tr. Vol. 26 p. 1743 ll. 18-24; Ex. 209 Staff witness Beck rebuttal testimony p. 2 ll. 21-23.

<sup>&</sup>lt;sup>292</sup> Staff witness Beck Tr. Vol. 26 p. 1772.

<sup>&</sup>lt;sup>293</sup> Id. at p. 1772, ln. 14-19.

While it is not Staff's primary recommendation on these issues, if the Commission decides to allow AmerenUE to continue the tracking mechanism, Staff recommends the Commission impose a ten percent cap, as Staff recommended and the Commission ordered in AmerenUE's last rate case, Case No. ER-2010-0318.<sup>294</sup> The Commission allowed the tracking mechanism for AmerenUE for the short-term goal of easing the financial burden of AmerenUE first having to comply with the Commission's vegetation management and infrastructure inspection rules.<sup>295</sup> AmerenUE has well established that it is complying with the Commission in AmerenUE's last rate case for both the vegetation management and infrastructure inspection programs. Staff recommends that the costs of both the vegetation management and infrastructure inspection programs be set at the test year amount, as trued-up through January 31, 2010 at \$50.4 million and \$7.6 million respectfully, and that the tracker mechanism for both programs be discontinued.

#### UNION ISSUES (List of Issues No. 13; \$ unknown)

The Unions support AmerenUE's proposed rate increase, but raise the following issues

- i. Should AmerenUE be required to expend a substantial portion of the rate increase investing in its employee infrastructure, in general, including recruitment and training, if the Commission has the authority to require AmerenUE to do so;
- ii. Should AmerenUE be required to fully and permanently staff itself for its normal and sustained workload, thereby reducing the need for subcontracting and overtime, if the Commission has the authority to require AmerenUE to do so;
- iii. Should AmerenUE be required to repair and rebuild components and equipment internally where prudent, if the Commission has the authority to require AmerenUE to do so;

<sup>&</sup>lt;sup>294</sup> Ex. 209 Staff witness Beck rebuttal testimony p. 5.

<sup>&</sup>lt;sup>295</sup> Ex. 202 Staff witness Rackers rebuttal testimony p. 4 ll. 9-17.
iv. Should AmerenUE be required to make good faith efforts to hire first locally, then regionally and then nationally, both its internal and external workforces, if the Commission has the authority to require AmerenUE to do so?

As it did in AmerenUE's last general electric rate increase case, Case No. ER-2008-0318,

Staff has taken no position on these issues. While Staff has taken no position on these issues,

Staff reminds the Commission of what it said regarding these same issues in the conclusions of

law section regarding them at pages 112 to 113 of its Report and Order in Case No. ER-2008-

0318:

The Commission has the authority to regulate AmerenUE, including the authority to ensure the utility provides safe and adequate service. However, the Commission does not have authority to manage the company. In the words of the Missouri Court of Appeals,

The powers of regulation delegated to the Commission are comprehensive and extend to every conceivable source of corporate malfeasance. Those powers do not, however, clothe the Commission with the general power of management incident to ownership. The utility retains the lawful right to manage its own affairs and conduct its business as it may choose, as long as it performs its legal duty, complies with lawful regulation, and does no harm to public welfare.<sup>344</sup> (Footnote in original).

Staff additionally quotes from a 1923 majority opinion of the United States Supreme Court who

reversed this Commission for not taking into account the change in value over time of property

dedicated to public service in setting rates and from whom the above quote is derived:

It must never be forgotten that, while the state may regulate with a view to enforcing reasonable rates and charges, it is not the owner of the property of public utility companies, and is not clothed with the general power of management incident to ownership.<sup>296</sup>

# FUEL ADJUSTMENT CLAUSE (FAC) (List of Issues No. 10)

i. Should the Commission discontinue AmerenUE's fuel adjustment clause, or should the Commission modify AmerenUE's fuel adjustment clause?

<sup>&</sup>lt;sup>344</sup> State ex rel. Harline v. Service Commission, 343 S.W.2d 177, 182 (Mo. App. 1960).

<sup>&</sup>lt;sup>296</sup> State ex rel. Southwestern Bell Telephone Company v. Public Service Commission of Missouri, 262 U.S. 276, 289; 43 S.Ct. 544, 547 (1923).

Section 386.266.5 RSMo Supp. 2009 provides:

Once such an adjustment mechanism is approved by the commission under this section, it shall remain in effect until such time as the commission authorizes the modification, extension, or discontinuance of the mechanism in a general rate case or complaint proceeding.

Rather than being extended or discontinued, AmerenUE's fuel adjustment clause should be modified. From Staff's perspective relevant circumstances have not significantly changed from those present when it opposed AmerenUE's fuel adjustment clause in its last general electric rate increase case, Case No. ER-2008-0318—circumstances including that (1) natural gas and purchased power price fluctuations have no material impact on AmerenUE's fuel and purchased power expense since AmerenUE only uses a small amount of natural gas and purchased power to meet its net system input, (2) increases in AmerenUE's costs of coal and uranium are predictable in timing and in amount, (3) AmerenUE is a significant buyer of coal giving it some market power, and (4) AmerenUE makes significant off-system sales.<sup>297</sup> But, in that case the Commission authorized AmerenUE to use a fuel adjustment clause. Further, now AmerenUE's fuel adjustment clause has only been in effect since March 1, 2009.<sup>298</sup>

AmerenUE's fuel adjustment clause has three four-month accumulation periods in each cycle—February to May, June to September and October to January. Each accumulation period is followed by a 12-month recovery period.<sup>299</sup> Each recovery period, in turn, is followed by a true-up. Staff will conduct a prudence review at least every 18 months.

AmerenUE's fuel adjustment clause has not been in effect long enough to complete the first recovery period. As pointed out by Staff witness Mantle in her surrebuttal testimony Ex.

<sup>&</sup>lt;sup>297</sup> Ex. 221 Staff witness Mantle Supplemental direct testimony pp. 4-5.

<sup>&</sup>lt;sup>298</sup> Ex. 121 AmerenUE witness Barnes direct testimony, p. 4; Ex 221; Staff witness Mantle supplemental direct testimony p 6.

<sup>&</sup>lt;sup>299</sup> Ex. 200 Staff Revenue Requirement Cost of Service Report p. 106; Ex. 121 AmerenUE witness Barnes direct testimony, Sch. LMB-E3.

222) at page five it takes AmerenUE 16 to 20 months to recover costs through its fuel adjustment clause. Because it is too early to adequately evaluate the fuel adjustment clause, the Commission should not discontinue AmerenUE's fuel adjustment clause.<sup>300</sup> However, to address issues that have arisen since the Commission first authorized AmerenUE's fuel adjustment clause, the clause should be modified to address those concerns as they are resolved by the Commission approved and ordered First Nonunanimous Stipulation and Agreement.

AmerenUE plans to file another general electric rate increase case before this Commission yet this year.<sup>301</sup> By then Staff may be able to adequately evaluate AmerenUE's fuel adjustment clause to make a recommendation on the merits of the clause.

ii. If the Commission modifies AmerenUE's fuel adjustment clause what percentage of the difference between actual fuel and purchased power costs, net of off-system sales and the cost included in base rates should the Commission adopt for recovery through the fuel adjustment clause?

Staff has concerns that electrical corporations are not as incented to achieve the same degree of accuracy in their estimates of their fuel and purchased power expenses in their rate case when they expect to recover through their fuel clause 95% of the difference between their actual expenses and the expenses included in their base rates, *i.e.*, the consequences of being wrong are of little or no deterrence.<sup>302</sup> Despite its concerns, because AmerenUE's fuel adjustment clause has not been in effect long enough to evaluate the adequacy of the current 95/5 sharing, the Commission should continue the sharing level at 95/5.

<sup>&</sup>lt;sup>300</sup> Ex. 200, Staff Revenue Requirement Cost of Service Report p. 108; Ex. 221 Staff witness Mantle supp. direct testimony pp. 5-6.

<sup>&</sup>lt;sup>301</sup> AmerenUE witness Baxter, Tr. Vol. 22 pp. 915-16.

<sup>&</sup>lt;sup>302</sup> Ex. 221 Staff witness Mantle supplemental direct pp. 10-14; Ex. 222 Staff witness Mantle surrebuttal testimony p. 8.

### **CLASS COST OF SERVICE and RATE DESIGN** (List of Issues No. 14)

While like many of the issues presented to the Commission the precision of mathematics is used for recommending the revenue responsibility by rate class of the customers in AmerenUE's rate classes, although much analyst judgment is used, a precise result must be achieved. In other words, in determining class revenue responsibilities mathematics is a tool used, but analyst judgment of how costs should be allocated to classes is employed, yet the sum of the revenue responsibilities of the classes must mathematically match AmerenUE's overall revenue requirement.

### **a. Class Cost of Service**: How should class revenue responsibility be determined?

i. What allocation methodology should be used for determining the production capacity allocator?

Because it recognizes that electricity usage is an important consideration to investing in generating plants the average and peak four coincident peak (4CP) method should be used for allocating production-capacity investment cost responsibilities among the customer classes.<sup>303</sup> The production-capacity allocators Staff determined using this method are shown in Table 6 on page 18 of the Staff's Class Cost-of-Service and Rate Design Report and, for convenience follow:

Class	RES	SGS	LGS & SPS	LPS	LTS
Production-Capacity Allocator	41.08%	10.42%	30.66%	9.20%	8.64%

With the average and peak 4CP method costs are allocated to the classes based upon the class contribution to system average and to system peak demands in the following manner:

<sup>&</sup>lt;sup>303</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 15.

- 1) The average demand, as a percentage of peak demand, is determined and is applied to each class's percentage contribution to average demand (weighted by system load factor);
- 2) then, the production-capacity costs related to peak demand (weighted by 1 system load factor) are allocated to classes based upon their monthly contribution to coincidential peak demand.
- 3) The results for each class are then combined to produce the average and peak class allocation factors.

For purposes of determining AmerenUE's cost to serve each customer class-class cost of service-production-capacity is AmerenUE's investment in generating plants and fixed operation and maintenance expenses.<sup>304</sup> AmerenUE's investment in generating plants and fixed operation and maintenance expenses is 35% of all of AmerenUE's investment.<sup>305</sup> Because it recognizes that electricity usage—energy loads—is an important consideration to investing in generating plants with their attendant fixed operation and maintenance expenses-productioncapacity investment—the average and peak four coincident peak (4CP) method should be used for allocating production-capacity investment cost responsibilities among the customer classes.<sup>306</sup> AmerenUE is a summer peaking utility which means the highest monthly peak demands on its system typically occur in the summer. These summer peak demands result from customers running their air conditioners.<sup>307</sup> The average and peak 4CP method Staff used to develop the production-capacity allocator has two components-a demand-related component and an energy-related component. The demand-related component is based on the contribution

<sup>306</sup> *Id.* at p. 15.

<sup>&</sup>lt;sup>304</sup> *Id*. at p. 14. <sup>305</sup> *Id*. at p. 14, Graph.

<sup>&</sup>lt;sup>307</sup> Ex. 208 Staff witness Scheperle surrebuttal testimony p.10.

of each class to the system peak load (or to a specified group of system peak demands). For each class, the energy-related component is based on the total energy (kilowatt hour or kWh) used by the class in a year divided by the total number of hours in the year.<sup>308</sup> To derive the energy-related component the total kWh used by the class in a year divided by the total number of hours in the year is weighted by the load factor, which is the ratio of the average system use during the same year to the total system use during the year. The demand-related component of the production-capacity allocator is one minus the load factor, which is also the ratio of total system use associated with the system peak.<sup>309</sup> The production-capacity demand related or peak component considers the four months with the highest peak demand, which occur during the four months of June through September.<sup>310</sup>

With this method, the four months with the highest system peak usage during the year are selected. For AmerenUE, based on the 12 months ended July 2009, the lowest of these coincident peaks is in excess of 85% of the highest.<sup>311</sup> Because there are four coincident peaks, each of which exceeds 85% of AmerenUE's annual system peak, using them to determine each class's relative share of the variation in system peak demands provides better sampling for a more accurate result in the allocation of production-capacity investment and costs to customer classes than relying on a single system coincident peak.<sup>312</sup>

While Staff relied on the average and peak 4CP method which it recommends the Commission adopt, Staff also performed an average and peak capacity utilization method as a

<sup>&</sup>lt;sup>308</sup> Ex 207 Staff witness Scheperle rebuttal testimony pp. 2-3.

<sup>&</sup>lt;sup>309</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 17.

<sup>&</sup>lt;sup>310</sup> Ex. 208 Staff witness Scheperle surrebuttal testimony p. 10.

<sup>&</sup>lt;sup>311</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 16 Table 4.

<sup>&</sup>lt;sup>312</sup> *Id.* at p. 16 Table 5.

check on the reasonableness of its results from the average and peak 4CP method. The results are very similar and verify the Staff's average and peak 4CP method results.<sup>313</sup>

ii. What allocation methodology should be used for determining the production fuel cost allocator?

In its testimony, Staff has described this allocator as the production-energy allocator. The costs Staff allocated with the production-energy allocator are those costs related directly to the customer's consumption of electrical energy (kWh) and consist primarily of fuel (less the cost of fuel for off-system sales), fuel handling, a portion of production plant maintenance expenses and the energy portion of net interchange power costs (variable operation and maintenance expenses).<sup>314</sup> Because these costs vary with the amount of energy used, they should be allocated on the basis of class contribution to annual energy.<sup>315</sup>

iii. If the Commission relies on the Average & Peak 4CP allocation method for determining the production cost allocator what peak demand data should it use?

Both Staff and Public Counsel presented class cost of service studies that included the Average & Peak 4CP production cost allocator. If the Commission relies on the Average & Peak 4CP allocation method for determining the production cost allocator, it should use the Staff's production allocators shown in a. i. above. These allocation factors use the corrected peak demand data AmerenUE provided to Staff in its response to Staff data request 0178 in which AmerenUE made corrections for customers who switched rate classes in 2008 and for having inadvertently used incorrect energy loss rates instead of system peak loss rates. Public Counsel's expert relied on AmerenUE peak demand data before these corrections.<sup>316</sup>

<sup>&</sup>lt;sup>313</sup> *Id.* at p. 18 Table 6.

<sup>&</sup>lt;sup>314</sup> *Id.* at pp. 13-14.

<sup>&</sup>lt;sup>315</sup> *Id.* at p. 19.

<sup>&</sup>lt;sup>316</sup> Ex. 208 Staff witness Scheperle surrebuttal testimony p. 13.

iv. What allocation methodology should be used for determining the transmission cost allocator?

AmerenUE's transmission system consists of highly integrated bulk power supply facilities, high voltage power lines and substations that transport power to other transmission or distribution voltages.<sup>317</sup> Because the 12 coincident peak (12CP) allocation method satisfies periods of normal use and intermittent peak use throughout all twelve months of the year, and employs class demands during peak periods, the 12CP methodology should be used.<sup>318</sup>

v. What allocation methodology should be used for determining the fuel cost allocator?

To the extent this refers to production fuel, then it is the same allocator described as the production fuel cost allocator in a.ii. above. As stated under that subpart, the class contribution to annual energy should be used for determining the fuel cost allocator, for the same reasons stated there. To the extent this refers to fuel used for off-system sales, then the cost of that fuel is offset against off-system sales revenues, and the result (net margin) is allocated to the customer classes using the production-capacity cost allocator since the net margin from off-system sales is treated as revenue to AmerenUE derived from power plants for which retail customers are paying.<sup>319</sup>

vi. What allocation methodology should be used to allocate net margins from off-system sales to the customer classes?

<sup>&</sup>lt;sup>317</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 19.

<sup>&</sup>lt;sup>318</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 19, Ex. 208 Staff witness Scheperle surrebuttal testimony pp. 10-11.

<sup>&</sup>lt;sup>319</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report pp. 23 and 51; Ex. 208 Staff witness Scheperle surrebuttal testimony p. 11.

Because the margin from off-system sales is treated as revenue to AmerenUE derived from power plants for which retail customers are paying, that margin should be allocated using the production-capacity cost allocator based on the average and peak 4CP method.<sup>320</sup>

vii. Should the revenue responsibility of the various customer classes be based in part on the class cost-of-service study results?

Yes. Cost-of-service study results should be used as one of a number of factors when considering shifts, on an overall revenue neutral basis, of revenue responsibilities among customer classes. Staff did so in this case and recommends a shift in revenue responsibility of \$3 million from the large general service class to the residential class, but no other shifts, although its study results would support a larger shift and other shifts in responsibilities among the classes as well.<sup>321</sup>

viii. Should there be an increase or decrease in the revenue responsibility of the various customer classes?

Yes. On an overall revenue neutral basis there should be a shift in revenue responsibility

of \$3 million from the large general service class to the residential class, but no other shifts.<sup>322</sup>

ix. If the answer to "viii" above is "yes," what basis should be used to increase or decrease the revenue responsibility of the various classes?

The primary general guides should be the class cost-of-service studies and the results from them; however, other factors such as shifts made in AmerenUE's recent general electric rate cases, the rate designs of other electric utilities this Commission regulates, rate impacts to customers of changing customer charges and judgment of public acceptance and preference for rate stability should also be considered.<sup>323</sup>

<sup>&</sup>lt;sup>320</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report pp. 23 and 51; Ex. 208 Staff witness Scheperle surrebuttal testimony p. 11.

<sup>&</sup>lt;sup>321</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 23.

<sup>&</sup>lt;sup>322</sup> Id.

<sup>&</sup>lt;sup>323</sup> *Id.* at pp. 25-28.

### b. Rate Design

If the Commission adopts any of the competing positions on rate design of the Staff, those expressed in the nonunanimous stipulation and agreement on rate design filed March 17, 2010 (Stipulation and Agreement), the nonunanimous stipulation and agreement on rate design filed March 26, 2010 (Addendum to Stipulation and Agreement) or in the position statement of MEUA filed March 10, 2010, the result would be lawful and reasonable rates. Staff has already acknowledged the foregoing with respect to the nonunanimous stipulation and agreements by not opposing them and, also, by the testimony of Staff witness Scheperle under cross-examination by Public Counsel that Staff would have objected to the March 17 and March 26 stipulation and agreements if they would have resulted in rates that were not just and reasonable.<sup>324</sup> Further, on cross-examination by Staff counsel, Public Counsel witness Ryan Kind testified that the revenue neutral shifts Staff proposed would result in just and reasonable rates.<sup>325</sup>

Staff's rate design recommendations are:

1. That AmerenUE's rate schedules should be uniform for certain interrelationships among the non-residential rate schedules that are integral to AmerenUE's rate design. The following features should be uniform:

- The value of the customer charge be uniform across rate schedules, with the customer charges on the small power service (SPS), large power service (LPS), and large transmission service (LTS) rate schedules being the same.
- The rates for Rider B voltage credits be the same under all applicable rate schedules.
- The rate for the Reactive Charge be the same for all applicable rate schedules.
- The rate associated with Time-of-Day meter charge be the same for all applicable nonresidential rate schedules, with the exception of the small general service (SGS) rate schedule.<sup>326</sup>

<sup>&</sup>lt;sup>324</sup> Tr. Vol. 35 p. 3156.

<sup>&</sup>lt;sup>325</sup> Tr. Vol. 35, pp. 3133-34.

<sup>&</sup>lt;sup>326</sup> This recommendation includes a clarification omitted from Staff's recommendation in testimony. That clarification is that the rate associated with Time-of-Day meter charge for the small general service (SGS) rate schedule should not be the same as all other applicable nonresidential rate schedules.

2. On an overall revenue neutral basis, the revenue responsibility of the large general service (LGS) class be reduced by \$3,000,000 with a corresponding increase to the revenue responsibility of the residential (RES) class of \$3,000,000.

3. That, after the overall revenue neutral adjustments in 2. above, any overall revenue increase be implemented as an equal percentage increase to the revenue responsibilities of each class, including the lighting class.

4. That the residential (RES) class customer charge be increased from \$7.25 to \$8.50 per month.

5. That the residential (RES) class customer energy charges be increased uniformly, after making the adjustments described in 2. and 4. above.

6. That the small general service (SGS) class customer charges be increased from \$8.03 to \$9.28 for single-phase service and from \$16.71 to \$18.56 for three-phase service.

7. That the small general service class (SGS) customer energy charges be increased uniformly, after making the adjustments described in 6. above.

8. That the customer demand and energy charges for the large general service (LGS) and small primary service (SPS) classes be increased based on Staff's Cost of Service Report adjustments as described in David Roos's explanation in Staff's Revenue Requirement Cost of Service Report filed December 18, 2009 (page 112) and after making the adjustments described in 1. and 2. above.

9. That the customer demand and energy charges for the large primary service (LPS) class be increased uniformly after making the adjustments described in 1. above.

10. That the demand and energy charges for the large transmission service (LTS) class be increased uniformly after making the adjustments described in 1. above.

Staff notes that the nonunanimous stipulation and agreements on rate design filed March 17 and

26, 2010, both include the uniformity for certain interrelationships among the non-residential rate

schedules of 1. above, the small general service (SGS) class customer charges Staff recommends

(6. above) and, with the exceptions Staff recommends, the equal percentage increases in rate

elements Staff recommends for any increase in overall revenue requirement from this case.

While Staff acknowledges that other rate designs would result in just, lawful and reasonable rates, only one rate design may be implemented and, in the circumstances of this case, Staff's proposed rate design is the optimal rate design.

i. In respect to the class cost-of-service determination, including the class costof-service study determination, how should the Commission change the level of the rates of each customer class that it orders in this case?

Rates should be adjusted so there is a revenue neutral adjustment to increase the residential class's revenue responsibility by \$3.0 million (increase of 0.31%) and a revenue neutral adjustment to decrease the Large General Service class's revenue responsibility by \$3.0 million (decrease of 0.46%). After making the revenue neutral adjustments, any overall revenue increase should be implemented in rates to cause an equal percentage increase to the revenue responsibility of each customer class, including the lighting class.<sup>327</sup>

ii. At what level should the Commission set the residential class customer charge?

According to Staff's cost-of-service study AmerenUE's fixed costs to serve a residential customer exceed \$14.50 per month and AmerenUE has the lowest residential customer charge of all of the regulated electric utilities in Missouri. In light of the foregoing, that this charge has not changed since 2000 and the rate impact from this case, the Staff recommends the residential class monthly customer charge be changed from \$7.25 to \$8.50.<sup>328</sup> Even at \$8.50 AmerenUE's residential customer charge would be the second lowest electric residential customer charge in the state of Missouri.<sup>329</sup> Staff's recommendation is based on Staff's judgment of public acceptance of and preference for rate stability.<sup>330</sup>

<sup>&</sup>lt;sup>327</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 23.

<sup>&</sup>lt;sup>328</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report pp. 26-27.

<sup>&</sup>lt;sup>329</sup> *Id.* at Sch. MSS-6.

<sup>&</sup>lt;sup>330</sup> Ex. 208, Staff witness Scheperle surrebuttal testimony p. 6.

iii. At what levels should the Commission set the small general service class customer charge for single-phase and three-phase service, respectively?

According to Staff's cost-of-service study AmerenUE's fixed costs to serve a small general service customer exceed \$25 per month. Staff recommends increasing the single phase customer charge by the same amount of the residential customer charge, an increase of \$1.25 from \$8.03 to \$9.28, and maintaining the 2:1 relationship between the small general service customer monthly charge for single-phase service and for three-phase service. Therefore, Staff recommends the small general service customer monthly charge for single-phase service be \$9.28 and the general service customer charge for three-phase service be \$18.56.<sup>331</sup>

# **CONCLUSION**

Having addressed each of the remaining contested issues set forth in the list of issues, the Staff recommends the Commission: 1) keep in mind during its deliberations that the dominant thought and purpose of the policy embodied in the law that authorized the creation of the Commission and first conferred the powers it is exercising in this case is the protection of the public, while the protection it gives utilities is merely incidental; 2) carefully consider all the evidence adduced in this case on each of the issues remaining before it for decision, including not only the testimony of the expert witnesses, but also the testimony the Commission heard directly from members of the public in the local hearings; 3) based on the law and the evidence adopt Staff's position on each issue as set forth above; and 4) issue a report and order that is both reasonable and lawful with regard to each of the issues.

WHEREFORE, the Staff submits the foregoing as its initial post-hearing brief in this matter.

<sup>&</sup>lt;sup>331</sup> Ex. 205 Staff's Class Cost-of-Service and Rate Design Report p. 27.

Respectfully submitted,

### /s/ Nathan Williams\_

Nathan Williams Deputy Counsel Missouri Bar No. 35512

# <u>/s/ Sarah Kliethermes</u>

Sarah L. Kliethermes Legal Counsel Missouri Bar No. 60024

### /s/ Eric Dearmont\_

Eric Dearmont Assistant General Counsel Missouri Bar No. 60892

## /s/ Samuel D. Ritchie\_

Samuel D. Ritchie Legal Counsel Missouri Bar No. 61167

#### /s/ Jaime N. Ott\_

Jaime N. Ott Assistant General Counsel Missouri Bar No. 60949

Attorneys for the Staff of the Missouri Public Service Commission P. O. Box 360 Jefferson City, MO 65102

# **Certificate of Service**

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this  $23^{rd}$  day of April 2010.

<u>/s/ Nathan Williams\_\_\_\_\_</u>