

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

In the Matter of the Tariffs of Aquila, Inc., )	
d/b/a Aquila Networks-MPS and Aquila )	
Networks-L&P Increasing Electric Rates )	<b><u>Case No. ER-2007-0004</u></b>
for the Service Provided to Customers in )	
the Aquila Networks MPS and Aquila )	
Networks-L&P Service Areas. )	

**POSTHEARING BRIEF**

**OF**

**SEDALIA INDUSTRIAL ENERGY  
USERS ASSOCIATION**

**AND**

**AG PROCESSING, INC.**

Stuart W. Conrad (MBE #23966)  
David L. Woodsmall (MBE #40747)  
3100 Broadway, Suite 1209  
Kansas City, MO 64111  
(816) 753-1122 voice  
(816) 756-0373 facsimile  
E-mail: [stucon@fcplaw.com](mailto:stucon@fcplaw.com)

ATTORNEYS FOR SIEUA AND  
AG PROCESSING, INC.

April 27, 2007

## **TABLE OF CONTENTS**

<b>INTRODUCTION. . . . .</b>	<b>.5</b>
<b>RATE OF RETURN – RETURN ON COMMON EQUITY. . . . .</b>	<b>.5</b>
<b>A. Introduction. . . . .</b>	<b>5</b>
<b>B. What is the appropriate proxy group to be used in calculating         Aquila’s return on equity? . . . . .</b>	<b>7</b>
<b><u>1. Investment Grade. . . . .</u></b>	<b>8</b>
<b><u>2. Mergers &amp; Restructuring. . . . .</u></b>	<b>10</b>
<b>C. What is the appropriate model (discounted cash flow, capital asset         pricing model, risk premium) to be used in estimating Aquila’s return         on equity? . . . . .</b>	<b>11</b>
<b>D. In the event that the Commission decides to utilize a DCF model for         estimating return on equity, should the Commission utilize a constant         growth or multistage DCF model or both? . . . . .</b>	<b>13</b>
<b>E. For any DCF model, what is the appropriate growth rate? . . . . .</b>	<b>13</b>
<b><u>1. The utilization of analysts’ growth forecasts is a superior method             for measuring a company’s growth rate than historical growth rates             or sustainable growth rates. . . . .</u></b>	<b>13</b>
<b><u>2. Source of analysts’ growth rates. . . . .</u></b>	<b>14</b>
<b><u>3. Gorman Study. . . . .</u></b>	<b>15</b>
<b><u>4. Hadaway Study. . . . .</u></b>	<b>15</b>
<b>F. In the event that the Commission decides to utilize a risk premium         model for estimating return on equity, what is the appropriate         premium to account for the difference in risk between equity and         bondholders? . . . . .</b>	<b>20</b>
<b>G. In the event that the Commission decides to utilize a risk premium         model for estimating return on equity, what is the appropriate         interest rate for utility bonds? . . . . .</b>	<b>23</b>
<b>H. Is an equity add-on appropriate to account for Aquila’s construction         risk and small company nature? . . . . .</b>	<b>24</b>

1.	<u>Construction Budget.</u> . . . . .	.24
2.	<u>Failure to Consider Other Offsetting Risks</u>	
a.	Nuclear Operations. . . . .	28
b.	Operations in Deregulated States. . . . .	29
c.	Non-Regulated Affiliates. . . . .	31
d.	Hurricanes. . . . .	32
3.	<u>Need to Account for Specific Items of Risk.</u> . . . . .	32
I.	<b>What return on common equity should be used for determining Aquila's rate of return?</b> . . . . .	33
1.	<u>Satisfaction of <i>Hope</i> and <i>Bluefield</i> standards.</u> . . . . .	34

#### **RATE OF RETURN – CAPITAL STRUCTURE**

A.	<b>What capital structure should be used for determining Aquila's rate of return?</b> . . . . .	35
----	---	----

#### **ACCOUNTING AUTHORITY ORDERS**

A.	<b>Should the unamortized balance of the accounting authority orders the Commission issued for the Rebuild and Western Coal Conversion of Aquila's Sibley generating facility be included in Aquila Networks – MPS's rate base?</b> . . . . .	37
----	---	----

#### **FUEL COST RECOVERY**

A.	<b>What standard should the Commission use in determining whether to allow Aquila to use a fuel and purchased power adjustment mechanism?</b> . . . . .	37
1.	<u>Problems with "Radical Departure" from Traditional Ratemaking</u>	
2.	<u>Commission Discretion and Suggested Standard.</u> . . . . .	41
3.	<u>Aquila's Lack of Standard / Failure to Prove Need.</u> . . . . .	43
B.	<b>Should the Commission authorize Aquila to use a fuel and purchased power recovery mechanism allowed by 4 CSR 240-20.090?</b> . . . . .	45

1.	<u>Acute Need Standard.</u>	46
a.	<u>Rate Volatility.</u>	46
b.	<u>Unpredictable Utility Bills.</u>	47
c.	<u>Reduced Incentives to Achieve Cost Minimization.</u>	48
d.	<u>Distorted Investment Decisions.</u>	48
2.	<u>Legal Impediments to a Fuel Adjustment Clause.</u>	49
a.	<u>Aquila's FAC proposal allows for pass-through of imprudent costs.</u>	50
b.	<u>Prudence Reviews are not adequate protections.</u>	51
c.	<u>Lack of timely line loss study.</u>	54
d.	<u>Lack of heat rate testing.</u>	54
e.	<u>Lack of detailed explanation of includable costs.</u>	55
C.	<b>What portion of fuel and purchased power costs should be recovered by a recovery mechanism rather than by base rates?</b>	56
D.	<b>Should a fuel and purchased power adjustment mechanism include recovery of any demand costs?</b>	57
E.	<b>Should a fuel and purchased power adjustment mechanism require definitive production standards for recovery of fuel and purchased power costs via the mechanism?</b>	58
F.	<b><u>FAC</u>: If the Commission authorized Aquila to use a fuel adjustment clause, how should it be structured?</b>	60
1.	<u>What recovery period should be used in the FAC?</u>	60
2.	<u>How often should the fuel adjustment clause be adjusted?</u>	61
3.	<u>Should the fuel adjustment require a phase-in (cap) for sharp changes in fuel or purchased power costs?</u>	62
4.	<u>What line losses adjustment should be included in determining the fuel cost adjustment?</u>	63

5.	<u>What heat rate testing of generating plants should be conducted?</u>	
6.	<u>Length of Fuel Adjustment Clause.</u> . . . . .	65
7.	<u>Incentive by Design / Skin in the Game.</u> . . . . .	66
G.	<b><u>IEC: If the Commission authorizes Aquila to use an interim energy charge, how should it be structured?</u></b> . . . . .	69
1.	<u>What natural gas costs / prices should be included in the charge?</u>	
2.	<u>What coal costs / prices should be included in the charge?</u>	
3.	<u>What purchased power costs / prices should be included in the charge?</u>	
4.	<u>Should the IEC be established and trued-up on a divisional basis (for MPS and for L&amp;P separately) or on a unified basis (MPS and L&amp;P combined)?</u>	
5.	<u>Additional items to consider include treatment of off-system sales and hedging program costs / benefits?</u>	
	<b><u>CONCLUSION.</u></b> . . . . .	71

## **INTRODUCTION**

After the filing of the list of issues on March 22, the parties engaged in comprehensive settlement discussions. As a result of these discussions, a majority of the issues set forth in the issue list have been settled and the settlement approved. The issues, including their various subparts that remain for Commission decision are:

1. Rate of Return – Return on Common Equity;
2. Rate of Return – Capital Structure;
3. Accounting Authority Orders; and
4. Fuel Cost Recovery.

In this brief, SIEUA / AGP takes positions on return on common equity, capital structure and fuel cost recovery. As discussed, *infra*, SIEUA / AGP takes no position on the Account Authority Order issue.

### **Rate of Return – Return on Common Equity**

#### **A. Introduction**

Regulators have long lamented the “subjective” nature of the return on equity calculation. Regardless, subjective assessments utilized solely to attain a predetermined conclusion should be shunned. As the Missouri Commission has previously determined, return on equity analyses which are “highly subjective” and “do not present a technique or model which can be applied by the Commission to other utilities” should be rejected.<sup>1</sup>

Here, there are three ROE analyses. They are easily distinguishable. Unlike the analyses presented by Staff and SIEUA / AGP, Aquila ROE analysis (sponsored by Witness Hadaway) is fraught with **subjective** assumptions solely designed to inflate the recommended return on equity. Specifically, Aquila’s ROE recommendation relies on:

---

<sup>1</sup> *In re: Missouri Cities Water Company*, 26 Mo.PSC (N.S.) 1, 26 (May 2, 1983).

(1) a subjective elimination of the traditional constant growth DCF model; (2) a subjective growth rate in its multi-stage DCF model; (3) a subjective upward adjustment in the equity risk premium; (4) a subjective inflation in the yield for utility bonds; (5) a subjective equity adder purportedly to account for Aquila's small size and construction budget; and (6) a subjective rejection of all other aspects of risks. A brief review of recent utility commission decisions, however, shows that Hadaway's methodology is of questionable value and, therefore, has been soundly rejected.

It seems that Aquila, like some other utilities in the state, is exploring how high this Commission can be pushed with its return on equity authorizations. Encouraged by the recent KCPL award, that was already the highest in the nation for 2006 (11.25%), Missouri utilities have recently recommended: (1) **11.5%** (Missouri Gas Energy – Case No. GR-2006-0422); (2) **11.575%** (Missouri American – WR-2007-0216); (3) **12.0%** (AmerenUE – Case No. ER-2007-0002), and (4) **12.0%** (Laclede Gas – Case No. GR-2007-0208).

The Commission should reject the subjective methodology underlying Aquila's excessive ROE recommendation and, instead rely on objective assumptions contained in objective models. Based upon such a study, SIEUA / AGP recommends, as reflected in the following discussion, an ROE of 10.0%. Moreover, the Commission should also abandon the practice of deciding the critical issues in a case, then requesting multiple "scenarios" from the parties or Staff, followed by "tinkering" with the results of its earlier decisions because they do not result in a revenue award that is consistent with predetermined predilections. Nor should an excessive revenue award be "supported" by an excessive ROE determination that is not supported by strong record evidence.

**B. What is the appropriate proxy group to be used in calculating Aquila's return on equity?**

In his book Regulatory Finance: Utilities Cost of Capital, Dr. Roger Morin discusses the need for utilizing a comparable company group. As he notes, the use of the comparable company group is consistent with the *Hope* and *Bluefield* cases.<sup>2</sup> “The basic premise in determining a fair return is that the allowed return on equity should be commensurate with returns on investments in other firms with comparable risk, hence the need to extend the sample to firms of comparable risk.”<sup>3</sup> Therefore, in calculating the recommended return on equity, it is incumbent on the analyst to select a proxy company composed of “firms of comparable risk.”

SIEUA / AGP witness Michael Gorman identified a proxy group by analyzing all electric utilities followed by Value Line. Recognizing that Aquila's utility operations would likely have a bond rating of BBB, a business profile score of 6, and a common equity ratio of 47.5%,<sup>4</sup> Mr. Gorman then selected those comparable electric companies that have: (1) bond ratings at or above BBB and Baa for S&P and Moody's respectively; (2) common equity ratios between 40% and 60%; and (3) S&P business profile scores between 4 and 6.<sup>5</sup>

Mr. Gorman eliminated any company that recently had been exposed to corporate or market restructuring.<sup>6</sup> Finally, in order to assure availability of reliable data, Mr.

---

<sup>2</sup> *Regulatory Finance: Utilities' Cost of Capital*, Morin, Roger A., Public Utilities Reports, Inc. (1994) at page 201.

<sup>3</sup> *Id.*

<sup>4</sup> Exhibit 507, page 19.

<sup>5</sup> *Id.* Gorman's success in eliminating non-investment grade companies from his proxy group stands in stark contrast to Hadaway's inclusion of such firms, despite his stated attempts at excluding such firms. See, Section B.1, *infra*.

<sup>6</sup> *Id.* Gorman's success in eliminating, from his proxy group, those companies subject to risks associated with pending mergers stands in stark contrast to Hadaway's inclusion of such firms, despite his stated attempts at excluding such firms. See, Section B.2, *infra*.

Gorman only included companies that: (1) have consensus analyst growth rates estimates available from Zacks, Reuters and Thomson Financial;<sup>7</sup> (2) have not engaged in significant merger and acquisition activities; and (3) have not suspended dividends over the last two years.<sup>8</sup> Clearly, as a result of the strict application of his criteria, Mr. Gorman arrived at a proxy group composed of “firms of comparable risk.” His selections went unchallenged.

On the other hand, Aquila Witness Hadaway’s application of his comparable group criteria appears to have been very loosely applied. Certainly Hadaway **claimed** to use a similar screening methodology to arrive at his comparable company group. Indeed, he even claimed that his comparable group consisted of only “investment grade electric utilities” and utilities “not affected by recent mergers or restructuring.”<sup>9</sup>

**To be included in my group, reference companies must have at least a BBB [S&P] / Baa2 [Moody’s] bond rating;** they must derive at least 70 percent of revenues from regulated utility sales; and they must have consistent financial records not affected by **recent mergers or restructuring**, and a consistent dividend record with no recent dividend cuts.<sup>10</sup>

Despite these claims, cross examination revealed that Hadaway’s proxy group is not only unrepresentative of Aquila, it does not even reflect the criteria he presented.

#### 1. Investment Grade

Hadaway claimed that his comparable group consisted only of investment grade electric utilities. Cross examination revealed that Central Vermont, a Hadaway comparable company, was downgraded below investment grade **a full year** before Dr. Hadaway undertook his analysis and remains below investment grade today. Further

---

<sup>7</sup> The need for consensus analyst growth rates is highlighted in Section E.1.

<sup>8</sup> *Id.*

<sup>9</sup> Exhibit 13, page 4.

<sup>10</sup> *Id.*

revealing the depth and thoroughness of his analysis, Hadaway acknowledged ignorance of the downgrade!

Q. Under what circumstances would you want to include a non-investment grade company in your comparable companies?

A. I would not. If I knew about it and if it occurred prior to my forming the proof.

Q. Okay. Handing you a document – when did you file your direct testimony, did you say?

A. I believe I told you that the affidavit was signed in June of 2006.

Q. I'll hand you a document and ask you to identify it.

A. This is the form 10-K for 2006 for the Central Public Service Corporation.

Q. Central Vermont? Is that –

A. Yeah

Q. And they're one of your comparable companies?

A. Yes

Q. Okay. Will you turn to page 14 and read the highlighted portion of what's circled there or what's in the brackets?

A. Risks related to our current credit rating, which is below investment grade, June 2005, Standard & Poor's rating services (S&P) lowered our corporate credit rating to below investment grade.

We believe that restoration of our credit rating is critical to the long-term success of the company. While our credit rating remains below investment grade, the cost of capital, which is ultimately passed on to our customers, will be greater than otherwise would be.

That combined with our collateral requirements from creditors and from power purchases in sales makes restoration of our credit rating critical.

## 2. Mergers & Restructuring

Problems with Hadaway's comparable group do not end with the inclusion of a single non-investment grade utility. Despite his proclamations that he did not include utilities affected by recent mergers, cross-examination again proved otherwise. Mergers for both Duquesne Light and Green Mount Power were announced about the time that Hadaway prepared his direct testimony. Nevertheless, despite making other changes in his rebuttal testimony, Hadaway failed to modify his analysis to account for the erroneous inclusion of these companies involved in mergers.<sup>11</sup>

Q. Do you know if any of your comparable companies are currently in the process of closing a merger?

A. We use that as one of our scans. And at the time we did the initial selection of the companies, they were not. Some of them have since back in the late spring, early summer of 2006 have become involved in some merger activities.

Q. Who was that?

A. I'm not sure which ones.

Q. Okay. I'll hand you a document and ask you to identify it.

A. This is DeQuane [Duquesne] Light Holdings, Inc's Form 10-K for 2006.

Q. Turn to page 6, please. Read the highlighted portion.

A. On July 5, 2006, we entered into the merger agreement with Consortium – let me just spell this, Macquarie, Consortium led by Macquarie Infrastructure Partners and Diversified Utility and Energy Trusts, DUET.

---

<sup>11</sup> Indeed, in one recent proceeding, Dr. Hadaway adjusted his comparable company group on rebuttal to remove three utilities for which conditions have changed sufficiently for them to no longer qualify as comparable to the target utility. See, *Washington Utilities and Transportation Commission v. PacifiCorp*, 2006 Wash. U.T.C. Lexis 156 (Washington Utilities and Transportation Commission, April 17, 2006).

And still again:

Q. I'll hand you a document and ask you to identify it.

A. This is Green Mount Power Corporation's Form 10-K for 2006.

Q. Turn to page 8, please. Read the highlighted portion at the bottom.

A. On June 22, 2006, the company announced that it had entered into an agreement. It's planned merger date as of June 21<sup>st</sup>, 2006 (the merger agreement) among Northern, New England Energy Corporation, Vermont Corporation, NNEEC, North Stars, Merger Subsidiary Corporation, a Vermont corporation and wholly owned subsidiary of NNEEC (the merger sub), company – and the company pursuant to which merger sub will be merged with and into the company (the merger).

Clearly, by Dr. Hadaway's own stated criteria, his selection of a comparable company group is deficient. By including utilities that were either below investment grade or involved in recent mergers or restructuring, both characteristics that he admits should eliminate companies from the proxy group, Dr. Hadaway has constructed a proxy group that is not of "comparable risk" to Aquila. Mr. Gorman's proxy group does not suffer from these same deficiencies. The Commission should utilize Mr. Gorman's proxy company group.

**C. What is the appropriate model (discounted cash flow, capital asset pricing model, risk premium) to be used in estimating Aquila's return on equity?**

Since the discounted cash flow model was first presented in 1907, several other models have been proposed to quantify a utility's return on equity. As detailed by Dr. Morin, "[t]he fair return to the equity holder of a public utility's common stock has been typically derived from four main approaches: (1) Comparable Earnings; (2) Discounted Cash Flow (DCF) Techniques; (3) Risk Premium; and (4) Capital Asset Pricing Model

(CAPM).”<sup>12</sup> As Dr. Morin notes, the regulatory method employed is “immaterial” and that each can lead to an end result that “is reasonable to the consumer and the investor.”<sup>13</sup>

Despite the availability of each of these various models, the DCF model has found widespread favor with the vast majority of state utility commissions. “Before the mid-1960s, regulators placed almost exclusive reliance on the Comparable Earnings approach. Because of several problems encountered in implementing that approach, the Discounted Cash Flow (DCF) approach has supplanted Comparable Earnings in popularity.”<sup>14</sup> Excepting for several recent decisions by this Commission, the DCF model has found overwhelming acceptance in Missouri. It is attractive because it avoids the potential of subjective manipulations.

The Commission finds the DCF approach is considerably more systematic and allows this Commission to treat all utilities which it regulates in a consistent manner. The use of the comparable earnings approach can be helpful, but the results of the analysis of an individual person can vary so significantly that reliance on that approach could result in a considerable variation in the treatment accorded various companies before this Commission. Since a company has only its own interests in mind it can tout the advantages of the comparable earnings approach. However, this Commission, having a number of utilities under its jurisdiction should be expected to give evenhanded consideration in its determination of an appropriate rate of return for those companies subject to its jurisdiction.<sup>15</sup>

In this proceeding, with the utilization of reasonable assumptions, any of the recognized return on equity models (DCF, CAPM, or risk premium) will lead to an end result that “is reasonable to the consumer and the investor.” Similarly, the Commission should be suspicious of any analyst that summarily rejects a single model based on

---

<sup>12</sup> Morin at page 12.

<sup>13</sup> *Id.* at page 13.

<sup>14</sup> Morin at page 17.

<sup>15</sup> *Re: Missouri Public Service Company*, 20 Mo. P.S.C. (N.S.) 68, 108-109 (1975) (emphasis added).

subjective considerations.<sup>16</sup> Furthermore, the Commission should be ever vigilant to guard against that company analyst that “only has its own interests in mind.”

**D. In the event that the Commission decides to utilize a DCF model for estimating return on equity, should the Commission utilize a constant growth or multistage DCF model or both?**

As reflected in the treatise of Dr. Morin and as explained, *supra*, either the constant growth or multistage DCF model, with the use of reasonable input assumptions (dividend yield and growth factor), will result in a reasonable estimation of Aquila’s return on equity. The Commission should be careful not to subjectively eliminate objective results from repeatable models based solely on the fact that the results differ from some predetermined return on equity.

**E. For any DCF model, what is the appropriate growth rate?**

1. The utilization of analysts’ growth forecasts is a superior method for measuring a company’s growth rate than historical growth rates or sustainable growth rates.

The most difficult aspect of implementing the DCF model is the determination of an appropriate growth rate. As Dr. Morin notes, “[t]he principal difficulty in calculating the required return by the DCF approach is in ascertaining the growth rate that investors are currently expecting.”<sup>17</sup> Nonetheless, despite this difficulty, “[t]hree general approaches to estimating expected growth can be used: (1) historical growth rates; (2) analysts’ forecasts; and (3) sustainable growth rates.”<sup>18</sup> Of these three methodologies, Dr. Morin notes that “the latter is the least desirable.”<sup>19</sup> Of the remaining two

---

<sup>16</sup> See, Section E.4.

<sup>17</sup> Morin at page 140.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at page 162. Among the reasons provided by Dr. Morin for discounting the use of the sustainable growth rate method is that it suffers from greater complexity than is necessary, it involves an element of circularity and it does not correlate to elements of value such as stock price. (Morin at pages 161 and 162).

methodologies Dr. Morin notes that historical growth rates “may no longer be applicable if structural shifts have occurred.”<sup>20</sup> As a result, Dr. Morin finds that “[a]nalysts’ growth forecasts may be more relevant since they encompass both history and current changes.”<sup>21</sup>

## 2. Source of analysts’ growth rates

In this case, all three return on equity analysts have foregone the use of historical and sustainable growth rates in favor of analysts’ forecasts. Once the method for determining the appropriate growth rate is reached, the issue involves the appropriate source of reliable analysts’ forecasts. On this issue Dr. Morin notes an obvious preference for growth rate forecasts from large reputable investment research houses. “Empirical studies have also been conducted showing that investors who rely primarily on data obtained from several large reputable investment research houses and security dealers obtain better results than those who do not.”<sup>22</sup> The reason that data from such large investment research houses is superior is logical.

Because of the dominance of institutional investors and their influence on individual investors, analysts’ forecasts of long-run growth rates provide a sound basis for estimating required returns. Financial analysts also exert a strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of *g* [growth rate]. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations.<sup>23</sup>

---

<sup>20</sup> *Id.* at page 157.

<sup>21</sup> *Id.* Dr. Morin’s logic follows in lockstep with that advanced by SIEUA / AGP witness Gorman. “Security analysts’ growth estimates have been shown to be more accurate predictors of future returns than growth rates derived from historical data.” Exhibit 507, page 22.

<sup>22</sup> *Id.* at page 155.

<sup>23</sup> *Id.* at page 154. (emphasis added). Again, Dr. Morin’s logic is remarkably similar to that advanced by SIEUA / AGP witness Gorman. Analysts’ growth estimates are more accurate because these “growth projections are the most likely growth estimates that are built into stock prices.” Exhibit 507, page 22.

Morin, however, warns against over-reliance on a single analyst. “Exclusive reliance on a single analyst’s growth forecast runs the risk of being unrepresentative of investors’ consensus forecasts.”<sup>24</sup> For this reason, Morin recommends that “an average of all the available forecasts from large reputable investment houses is likely to produce the best DCF growth rate.”<sup>25</sup> Morin specifically suggests published sources such as Institutional Brokers Estimate System (IBES) and Zacks Investment Service.<sup>26</sup>

### 3. Gorman Study

In this case, SIEUA / AGP witness Gorman conducted a DCF analysis that, consistent with the logic advanced by Dr. Morin, relies exclusively on an average of available forecasts from large reputable investment houses. As Gorman notes, “I have relied on a consensus, or mean, of professional security analysts’ earnings growth estimates.”<sup>27</sup> Specifically, Gorman notes that he “used the average of three sources of customer growth rate estimates, including Zack’s Detailed Analyst Estimates, Thomson Financial, and Reuters First Call.”<sup>28</sup> Using the consensus growth rate provided by these large reputable investment houses, Gorman arrives at a DCF based return on equity of 9.4% for his comparable group and 9.5% for the Hadaway proxy group.<sup>29</sup>

### 4. Hadaway Study

Similarly, Aquila witness Hadaway conducted a study using such consensus analysts’ (Zack’s and Value Line) growth rates. Unlike Gorman, however, Hadaway immediately rejects the results of the study. Hadaway’s rejection is based on his

---

<sup>24</sup> *Id.* at page 156.

<sup>25</sup> *Id.* at page 155.

<sup>26</sup> *Id.* at pages 155-156.

<sup>27</sup> Exhibit 507, page 22.

<sup>28</sup> *Id.* See also, Tr. 517.

<sup>29</sup> Exhibit 507, page 23. Gorman’s DCF calculation for Hadaway’s proxy group reaches a result that is identical to that conducted by Staff Witness Parcel Exhibit 221, page 24.

subjective belief that the results of such a “traditional” constant growth DCF model are “not consistent with consensus economic projections for higher interest rates.”<sup>30</sup> Proving the dangers of relying on subjective assessments, time has shown that Hadaway’s prognostication of higher long term interest rates was misplaced. Indeed, in that period of time, interest rates have declined by approximately 50-60 basis points.<sup>31</sup>

Despite his woeful failure to accurately predict long term interest rates, Hadaway nonetheless foregoes any reliance on consensus analysts’ growth rates. Instead, Hadaway advances his own unique, but inflated, growth rate – the long term growth in nominal Gross Domestic Product (GDP), based upon historical 10, 20, 30 and 40 year periods.<sup>32</sup> The record indicates, however, indicates that GDP growth rate is inherently flawed for multiple reasons.

First, Hadaway’s GDP growth rate, since it is “historical” in nature, is not consistent with his use of a “forecasted” dividend yield. As Staff witness Parcell notes:

All of Dr. Hadaway’s other growth rates in his “traditional” DCF analyses (i.e., BR growth and EPS growth) reflect projections of future growth. On the other hand, Dr. Hadaway only uses historic rates in his GDP growth input. Apparently, Dr. Hadaway believes it is not proper to use historic growth rates of financial indicators (i.e., BR growth and EPS growth), but it is proper to use only historical growth rates in his GDP input.<sup>33</sup>

Had Hadaway used a forecasted projection of GDP growth, such as those provided by objective sources such as the Social Security Administration, the Energy Information Administration, or Global Insight, it would have led to a DCF model result of approximately 9.65% to 9.75%.<sup>34</sup> Indeed, while FERC uses, in part, a GDP driven

---

<sup>30</sup> Exhibit 13, page 42.

<sup>31</sup> Exhibit 222, page 6.

<sup>32</sup> Exhibit 13, page 41.

<sup>33</sup> Exhibit 222, pages 6-7.

<sup>34</sup> *Id.* at pages 9-10.

growth rate, it is explicit in its use of a forecasted rate provided by objective sources such as the Social Security Administration, the Energy Information Administration, or Global Insight.<sup>35</sup> In fact, despite his appearance “in over 375 utility proceedings before about 35 regulatory agencies in the United States and Canada,”<sup>36</sup> Staff witness Parcell has never encountered a regulatory agency that uses the historic GDP growth rate suggested by Hadaway.<sup>37</sup>

Second, Hadaway’s use of the historic GDP growth rate is not directly relevant to the comparable electric companies since it is derived from the economy as a whole. As pointed out in a recent Arkansas Commission decision, the use of the historic economy-wide GDP growth rate is not relevant to the comparable company group.

With regard to Mr. Hadaway's use of the Gross Domestic Product (GDP) growth rate, he is correct that investor-expected dividend growth rates overall are likely correlated with GDP growth rate. However, he has failed to demonstrate that industry-specific DCF investor-expected growth rates are also equal to the nominal GDP growth rate. This is a crucial distinction. For example, a mature industry may have a rich dividend yield and a small expected growth rate, while a young industry may, conversely, have a small dividend yield and a large expected growth rate. It would be reasonable to expect the mature [electric] industry's expected dividend growth rate to be less than nominal GDP growth, while the young industry's expected growth is greater than GDP growth. Long-term, the three growth rates are not equal.<sup>38</sup>

Ultimately, after rejecting Hadaway’s analysis and recommendation of a 10.75% return on equity, the Arkansas Commission authorized a return of 9.45% - 130 basis points below Hadaway’s recommendation.<sup>39</sup>

---

<sup>35</sup> *Id.* at Schedule 3.

<sup>36</sup> Exhibit 221, page 1.

<sup>37</sup> Exhibit 222, page 9.

<sup>38</sup> *In re: Centerpoint Energy*, 245 P.U.R. 4<sup>th</sup> 384 (Arkansas Public Service Commission, September 19, 2005) (emphasis added).

<sup>39</sup> *Id.*

Third, Hadaway's GDP growth rate, since it is based on historical figures, is inflated. That is, the historical GDP growth rate is "strongly influenced by the actual inflation rate experienced over that [historical] time period."<sup>40</sup> Recognizing that the level of projected inflation is much lower than the historic inflation rate included in Hadaway's GDP assumption, the forecasted GDP growth rate (net of inflation) is actually significantly lower than the historical GDP growth. In fact, reducing Hadaway's historic growth rate by the projected level of inflation leads to a going-forward GDP growth rate comparable to those published by the Social Security Administration, the Energy Information Administration, or Global Insight.<sup>41</sup> Consistent with the DCF results produced by using these objective sources of GDP growth rate, an inflation adjusted GDP growth rate leads to a DCF result of 9.8%.<sup>42</sup>

Fourth, since he fails to adjust for the level of projected inflation, Hadaway's GDP growth rate is not sustainable. It is an economic impossibility for the growth rate of utility companies to exceed that for the entire economy for any extended period of time.

As Gorman points out:

Utilities' dividend growth cannot sustain a growth rate that exceeds the growth rate of the overall economy. The growth rate of the utility's service territory is the proxy for the sustainable long-term growth rate of earnings. Utilities invest in plant to meet sales growth, and sales growth in turn is tied to economic activity. Hence, nominal GDP growth [i.e., net of inflation] is a proxy for the highest sustainable long-term growth rate of the utility.<sup>43</sup>

As a result of all of these flaws inherent in Hadaway's proposed historic GDP growth rate, his analysis has been roundly rejected by various utility commissions. In

---

<sup>40</sup> Exhibit 508, page 8.

<sup>41</sup> Exhibit 508, page 9.

<sup>42</sup> *Id.* at page 10.

<sup>43</sup> Exhibit 507, page 24.

addition to the Arkansas decision, *supra*, the Illinois Commission has recently issued a decision in which it agreed with the Staff that the use of the historic GDP growth rate “leads to an improper and overstated estimate of the cost of capital.”<sup>44</sup> Ultimately, relying on more traditional methods for deriving a DCF growth rate, the Illinois Commission rejected Hadaway’s proposed return of 11.0% and authorized a return on equity of 10.045%.<sup>45</sup>

Still again, the Washington Commission criticized Hadaway’s decision to use a historical measure of GDP growth rather than the widely accepted GDP growth forecasts. Specifically, referencing the testimony of Mr. Gorman, the Washington Commission found: “[I]n this case, we find persuasive Mr. Gorman's argument, that if growth in GDP is used for this critical input to the DCF formula, it should be a forward-looking, not an historical average.”<sup>46</sup> Relying in part on the logic advanced by Mr. Gorman, the Washington Commission rejected Hadaway’s proposed return on equity of 11.125% and instead authorized a return on 10.2%.<sup>47</sup>

The Missouri Commission should avoid the flaws inherent in Hadaway’s proposed historic GDP growth rate. Instead, the Commission should adopt the logic advanced by Mr. Gorman and Dr. Morin – the use of growth rate forecasts from large reputable investment research houses.

---

<sup>44</sup> *In re: Commonwealth Edison*, 250 P.U.R. 4<sup>th</sup> 161 (Illinois Commerce Commission, July 26, 2006).

<sup>45</sup> *Id.* See also, Tr. 449-450.

<sup>46</sup> *In re: Washington Utilities and Transportation Commission v. PacifiCorp*, 2006 Wash. U.T.C. Lexis 156 (Washington Utilities and Transportation Commission, April 17, 2006).

<sup>47</sup> *Id.*

**F. In the event that the Commission decides to utilize a risk premium model for estimating return on equity, what is the appropriate premium to account for the difference in risk between equity and bondholders?**

Equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required to pay dividends on common equity or to guarantee any specific return to its equity investors. As a result of this higher risk, equity investors demand a premium to the return earned by debt holders.<sup>48</sup>

The general approach is relatively straightforward: First, determine the historical spread between the return on debt and the return on equity. Second, add this spread to the current debt yield to derive an estimate of current equity return requirements.<sup>49</sup>

Therefore, the first step in any risk premium analysis is to “determine the historical spread between the return on debt and the return on equity.” Gorman quantified this historical spread in two ways. First, he compared the difference between the required return on common equity authorizations for each year in the period of 1986 through 2006 and compared that to the Treasury bond yield for the same years.<sup>50</sup> Based on this analysis it was determined that investors demand a premium of 5.2% over the Treasury bond yield.<sup>51</sup> Second, Mr. Gorman compared the difference between the required return on equity authorizations to the A-rated utility bond yield.<sup>52</sup> This

---

<sup>48</sup> Exhibit 507, page 26.

<sup>49</sup> Morin at page 269.

<sup>50</sup> Exhibit 507, Schedule MPG-9.

<sup>51</sup> *Id.*

<sup>52</sup> *Id.* at Schedule MPG-10.

comparison indicated that investors demand a premium of 3.7% over the yield for A-rated utility bonds.<sup>53</sup>

By way of comparison, Aquila witness Hadaway conducted a similar analysis by which he compared the average authorized return on equity for each year for the period 1980 to 2005 and also compared that against the bond yield for public utility bonds.<sup>54</sup> As a result of his analysis, Hadaway quantifies the risk premium for electric utilities common equity over utility bond yields at 3.09%.<sup>55</sup> Had he reflected the same time period, as Gorman, thereby omitting the years 1980-1985, his risk premium would have been an identical 3.7%.<sup>56</sup>

Not surprisingly, given that his risk premium would provide a recommended return on equity of only 9.2%,<sup>57</sup> Hadaway undertook a statistical analysis designed to inflate his risk premium based upon perceived changes in interest rates. Based upon this statistical regression analysis, Hadaway magically increased his risk premium to 4.20%.<sup>58</sup>

It is unquestioned that the equity risk premium will vary based on changes to the market perceived risk of equity investments relative to bond investments. While the equity risk premium will vary based on changes to the market perceived risk of equity investments, the risk premium does not change simply as a result of changes to nominal interest rates, as suggested by Company witness Hadaway. Nevertheless, Hadaway would have this Commission believe that the “risk premium spread” varies inversely with interest rates. That is to say, as interest rates decline, the risk premium will increase, and

---

<sup>53</sup> *Id.*

<sup>54</sup> Exhibit 13, Schedule SCH-10.

<sup>55</sup> *Id.*, Schedule SCH-10, page 1.

<sup>56</sup> *Id.*

<sup>57</sup> Exhibit 507, page 12.

<sup>58</sup> *Id.* at page 11.

vice versa.<sup>59</sup> Hadaway postulates that since the interest rates in his 25 year study period were high, the risk premium reflected over the same period must, therefore, be low. Based upon this subjective theory, Hadaway increases the risk premium spread.

Recent history proves that Hadaway's theory is faulty. Over the past ten years interest rates on utility bonds have declined by approximately 162 basis points.<sup>60</sup> Given Hadaway's theory, one would expect to see, therefore, a significant increase in the measured risk premium. Contrary to Hadaway's theory, however, the risk premium is virtually unchanged.<sup>61</sup> In fact, the current utility bond yield spreads are at the lowest in the past 26 years.<sup>62</sup>

The fact that the risk premium has stayed low is not surprising. In the past five years, the electric industry has been reinventing itself. Utilities have divested themselves of energy marketing operations and high-risk non-regulated operations. The market's perception of such changes has been to decrease the risk premium, regardless of the change in interest rates. The appropriate equity risk premium in this case should recognize the current relative risk of equity versus debt investments, not a subjective perception of interest rates.

In his testimony, Hadaway admits that "[i]n most recent years, with lower interest rates, allowed regulatory risk premiums have generally been the three to four-percent range."<sup>63</sup> Consistent with Hadaway's admission, the appropriate risk premium for use in this proceeding is 3.7% over A-rated utility bonds and 5.2% over the lower risk Treasury bonds.

---

<sup>59</sup> Exhibit 13, page 43.

<sup>60</sup> Exhibit 507, Schedule MPG-11.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at page 28.

<sup>63</sup> Exhibit 222, pages 11-12.

**G. In the event that the Commission decides to utilize a risk premium model for estimating return on equity, what is the appropriate interest rate for utility bonds?**

Once quantified, the appropriate risk premium is added “to the current debt yield to derive an estimate of current equity return requirements.”<sup>64</sup> While the debt yield of A-rated bonds is acceptable, Morin prefers to use the current debt yield for risk free securities.

[S]everal analysts prefer to use the yield on risk-free securities rather than the yield on corporate bonds in order to isolate the spread component of the return and avoid having to adjust the debt yield for default risk differentials. An added incentive for selecting risk-free government securities is the presence of well developed and active markets for interest rate futures contracts on government bonds. . . . Yields on default-free long-term Treasury bonds are thus more appropriate.<sup>65</sup>

Recognizing that the use of current debt yields (i.e., 6.0%), would result in a recommended return on equity in line with the rejected DCF analysis, Hadaway instead adds his risk premium spread to a “projected single-A utility debt cost of 6.85 percent.”<sup>66</sup> Interestingly, the “projected” debt yield is not provided by any authoritative academic or financial analysis. Rather, Hadaway’s “projected” debt yield is derived through a subjective assessment of increases in interest rates.

As was indicated earlier, Hadaway’s assertion that interest rates would increase has been proven erroneous during the pendency of this proceeding. Rather than increase, interest rates have declined by approximately 50-60 basis points.<sup>67</sup> Indeed, contrary to Hadaway’s subjective view of interest rates, the “consensus projections of Treasury

---

<sup>64</sup> Morin at page 269. (emphasis added). See also, Morin at page 278 in which he discusses the need to add the risk spread to the “current yield” of Treasury bonds or A-rated utility bonds..

<sup>65</sup> *Id.* at pages 278-279.

<sup>66</sup> Exhibit 13, page 44.

<sup>67</sup> Exhibit 222, page 6.

interest rates over the next two, five and ten years indicate a relatively flat interest rate environment relative to today's interest rates.”<sup>68</sup>

**H. Is an equity add-on appropriate to account for Aquila's construction risk and small company nature?**

As detailed in the discussion of the comparable company group, it is incumbent on the analyst to select a proxy group composed of “firms of comparable risk.” In this way, while each company may not have the same identical items of specific risk, the overall risk profile for those companies is comparable. Therefore, while Aquila may have certain risk associated with its small size or construction budget, Aquila benefits from the fact that it does not experience risks associated with nuclear generation, non-regulated affiliates, hurricanes; or operations in deregulated jurisdictions like many of the comparable companies. In total, these individual items of increased and decreased risk combine to form the total company business risk profile. It is this overall company business risk profile which is identical between the comparable companies. As such, it is “redundant and unnecessary to add an equity risk premium to a proxy group that already reflects the higher operating risk associated with small company operations.”<sup>69</sup>

**1. Construction Budget**

Despite the contention that his proxy group is allegedly comparable to Aquila, Hadaway nonetheless asserts that it appropriate to provide an equity adder to account for the fact that these companies are somehow not comparable. Primarily, Hadaway contends that the return on equity should be increased to account for Aquila's construction budget. Hadaway attempts to quantify the relative risk associated with the comparable companies' construction budgets by dividing the 2006-2011 projected capital

---

<sup>68</sup> Exhibit 508, page 12 and Schedule MPG-1.

<sup>69</sup> Exhibit 508, page 5.

spending by the 2005 net plant.<sup>70</sup> The evidence in the record, however, shows that Hadaway's subjective assessment is fundamentally erroneous and should be rejected.

First, Hadaway's analysis does not measure construction risk. Rather, by comparing projected construction expenditures to net plant, Hadaway actually measures the projected growth in a particular company's assets. In this regard, Aquila's net plant is projected to grow faster than most of the comparable companies. That said, however, it is inherently easier for a small company to have a large increase in asset growth than it is for a large company to experience similar growth. Thus, while Aquila may experience rapid asset growth through the addition of a portion of a single baseload generating unit, such an asset addition would barely even register to comparable companies like American Electric Power, Southern Companies and Consolidated Edison. Therefore, while a \$300 million investment in a coal generation facility like Iatan 2 can cause an increase of 23.1% in Aquila's net plant, such an investment for the Southern Companies would only increase net plant by 1.0%, 1.2% for American Electric Power and 1.8% for Consolidated Edison.<sup>71</sup>

Second, the projected capital expenditures are undoubtedly inflated for Aquila as a result of Aquila's failure to invest in its Missouri operations over time. Recognizing that depreciation will cause plant in service to decline over time, net plant will be lower unless the company continues to invest in its operations. As a result of its self-induced financial problems in the last 5 years and its inability to access capital, Aquila has foregone additional investments in its Missouri operations. In fact, the record is replete with evidence indicating that Aquila has avoided the construction of capital assets in

---

<sup>70</sup> Exhibit 13, Schedule SCH-1, page 1.

<sup>71</sup> *Id.* See column entitled 2005 net plant.

favor of long term purchased power agreements.<sup>72</sup> Aquila's predisposal towards purchased power agreements, as a result of its financial condition, in combination with the erosion to rate base resulting from depreciation over time, has resulted in a deflated plant in service balance for Aquila. Necessarily, therefore, Aquila's construction budget, when compared against net plant, will appear higher.

Third, Hadaway's contention that the 2006-2011 construction budgets causes additional risk to Aquila is undermined by the public statements of Aquila's management. As part of its 10K annual report, Aquila's management is required to include a discussion of all risk factors which make the company "speculative or risky."<sup>73</sup> Interestingly, while Aquila discusses risk associated with weather, non-investment grade credit ratings, and various tax and legal matters, it provides little discussion regarding risk associated with capital expenditures.<sup>74</sup> In fact, Aquila's management only mentions that capital expenditures may be problematic **if** the sale of the Kansas utility properties is not completed.

We have signed definitive agreements to sell our electric utility operations in Kansas for a base purchase price of \$249.7 million. We anticipate using the net proceeds generated by this divestiture to retire debt and other obligations, and to fund capital expenditures, including rate-base investments required to satisfy our long-term power generation and transmission needs and comply with environmental rules and regulations.

**If we cannot complete this asset sale, or if we are not able to retire a principal amount of debt sufficient to reduce our interest expense to a level that can be satisfied by the cash flow generated by our remaining utility operations, we will continue to have a cash flow shortfall.** We may also need to explore alternatives with respect to financing the significant

---

<sup>72</sup> Exhibit 206, page 44 (South Harper is first generation facility since 1983); Exhibit 207, page 18 ("Staff does not support Aquila using purchased power agreements to satisfy its need for adequate and reliable long-term power"); Exhibit 218, page 5 ("What Staff is opposed to is a series of short-term PPA, which is how Aquila has met its growing needs since 2005.").

<sup>73</sup> 17 C.F.R. Ch. II §229.503(c).

<sup>74</sup> Exhibit 512, pages 25-29.

capital expenditures anticipated in connection with environmental upgrades and compliance, as well as capital expenditures generally required to continue to provide safe and reliable service to our remaining utility customers.<sup>75</sup>

On April 1, 2007, the sale of the Kansas electric utility property was closed.<sup>76</sup> With the closing of the sale of the Kansas utility property, Aquila's management no longer believes that it will have any problem financing its capital expenditures from "cash flow generated by the remaining utility operations." In fact, like Aquila's management, S&P notes that Aquila's Missouri operations' construction risk is merely "moderate."<sup>77</sup>

Fourth, as suggested by Aquila's management in its 10K, the most accurate indicator of risk associated with capital expenditures is cash flow, not plant in service.<sup>78</sup> Noticeably, despite the explicit connection between capital expenditures and cash flow, as suggested by Aquila's management, Hadaway neglected to perform any analysis of cash flow from utility operations.

It is apparent, that Hadaway's assertion that Aquila is exposed to additional financial risk associated with its capital expenditures is inherently faulty. The only support for Hadaway's assertion is based upon plant in service which is irrelevant to a company's ability to finance capital additions. Moreover, Aquila's management, under strict SEC mandate to discuss any risk associated with the company, stated that such risk was nonexistent upon the closing of the sale of the Kansas utility property. Hadaway's subjective and non-supported assertion should be rejected.

---

<sup>75</sup> *Id.* at page 25. (emphasis added).

<sup>76</sup> Tr. 621.

<sup>77</sup> Exhibit 507, page 6.

<sup>78</sup> In fact, the importance of cash flow to a utility's ability to finance capital expenditures has been explicitly recognized by the Commission in approving the amortization mechanism under the KCPL Regulatory Plan. Case No. EO-2005-0329.

## 2. Failure to Consider Other Offsetting Risks

Not only is Hadaway's contention that Aquila faces financial risk associated with its capital budget not supported by evidence in the record, the evidence actually indicates that Hadaway subjectively dismissed other aspects of risk that make Aquila less risky than most of the comparable companies.

### a. Nuclear Operations

A review of the 10Ks of many of the companies contained in Hadaway's proxy group indicates that those companies are subjected to increased operational risk associated with their nuclear operations. For instance, the risk factors set forth by Ameren's management in its 10K specifically state that "ownership and operation of nuclear generating facility creates business, financial and waste disposal risks."<sup>79</sup> Similarly, the risk factors set forth by the management of American Electric Power provide that the company is "exposed to nuclear generation risks."<sup>80</sup> Similarly, the management of DTE provides the following extensive discussion of the financial and business risk associated with its ownership of nuclear generating facilities.

Operation of a nuclear facility subjects us to risk. Ownership and operating a nuclear generating plant subjects us to significant additional risks. These risks include, among others, plant security, environmental regulation and remediation, operational factors that can significantly impact the performance and cost of operating a nuclear facility. While we maintain insurance for various nuclear-related risks, there can be no assurance that such insurance will be sufficient to cover our costs in the event of an accident or business interruption at that nuclear generating plant which may affect our financial performance.<sup>81</sup>

Mr. Hadaway was aware that Southern Company, Progress Energy, Pinnacle West, Energy East, Duquesne Light, DTE, American Electric Power and Ameren all are

---

<sup>79</sup> Tr. 334.

<sup>80</sup> Tr. 335.

<sup>81</sup> Tr. 335-336.

exposed to this significant risk associated with nuclear generation.<sup>82</sup> Noticeably, despite the intimate correlation between nuclear operations and business risk, Mr. Hadaway was **not** aware that other comparable companies (Xcel Energy, SCANA Corp., PPL Corporation, Green Mountain Power, and Central Vermont Public Service) also have nuclear operations.<sup>83</sup> The evidence indicates that over half (13 of 24) of the utilities in Hadaway's comparable company group are exposed to risk associated with nuclear operations. Despite the fact that he had made an upward adjustment to return on equity to account for alleged construction risk, Hadaway did not provide for a similar offsetting reduction to account for the fact that Aquila is not exposed to the same nuclear risk that accompanies most of the comparable companies.<sup>84</sup>

b. Operations in Deregulated States

Similar to the risk associated with nuclear operations, the introduction of competition in any particular jurisdiction of a comparable company causes increased risk.<sup>85</sup> As one risk factor in the DTE Energy 10K reveals:

In 1998, the MPSC authorized the electric customer choice program that allowed for a limited number of customers to purchase electricity from suppliers other than their local utility. The local utility continues to transport the electric supply to the customer's facilities, thereby retaining distribution margins. The electric customer choice program was phased in over a three-year period with all customers having the option to choose their electric supplier in January of 2002.

Detroit Edison lost 6 percent of retail sales in 2006, 12 percent in 2005 and 18 percent of such sales in 2004 as a result of customers choosing to purchase power from alternative electric suppliers. Customers participating in the electric customer choice program consist primarily of industrial and commercial customers whose MPSC authorized full service

---

<sup>82</sup> Tr. 336-337.

<sup>83</sup> Tr. 336-340.

<sup>84</sup> Tr. 340. Morin specifically notes that the need to account for risk associated with nuclear operations when he constructs his comparable company group. Morin at pages 206-207.

<sup>85</sup> Tr. 341.

rates exceed their cost of service. Customers who elect to purchase their electricity from alternative electric suppliers by participating in the electric customer choice program have an unfavorable effect on our financial performance.<sup>86</sup>

Of the companies in his proxy group, Hadaway recognizes that Ameren, American Electric Power, Central Hudson Energy, Consolidated Edison, DTE Energy, Duquesne Light, Energy East, Northeast Utilities, Pinnacle West, PPL Corporation and Puget Energy all operate in jurisdictions that provide some level of competition in its electric operations. In addition, despite the fact that such operations make such companies more risky, Hadaway was **not** aware that additional proxy companies (NSTAR and Xcel Energy) also face an “unfavorable effect” on their financial performance as a result of operations in competitive jurisdictions.

Over half (13 of 24) of the companies in Hadaway’s proxy group are exposed to risk associated with utility operations in competitive jurisdictions. Despite the fact that he had made an upward adjustment to return on equity to account for alleged construction risk, Hadaway did not provide for a similar offsetting reduction to account for the fact that Aquila is not exposed to the same risk of competitive jurisdictions that accompanies most of the comparable companies.<sup>87</sup>

---

<sup>86</sup> Tr. 342-343 (emphasis added). Interestingly, Aquila’s witness Fetter, who appeared for the purpose of presenting advice to the Commission on the need for establishment of a fuel adjustment clause and retreat from the benefits of traditional ratemaking, was Chairman when Michigan first started its retail choice experiment. (Tr. 579). Fetter admits that he “had the good sense to leave before it was decided.” (*Id.*). Despite his prominent role in this failed experiment, Fetter portends to possess the necessary knowledge to give this Commission advice on ratemaking and regulation. Surely this is akin to Buddy Bell pretending to give Tony LaRussa managing advice.

<sup>87</sup> Tr. 343.

c. Non-Regulated Affiliates

Similarly, the existence of significant non-regulated operations has a tendency of making an electric utility more risky.<sup>88</sup> For instance risk factors contained in the 10K for PPL Corp. provide the following insightful discussion of the risk associated with non-regulated operations.

Our international delivery businesses are also subject to risk with respect to rate regulation and operational performance. Our international delivery businesses expose us to risks related to laws in other countries, taxes, economic conditions, fluctuations in foreign current exchange rates, political and associated conditions and policies of foreign governments. These risks may reduce our results of operations from our delivery business.<sup>89</sup>

Cross-examination revealed that the following companies are exposed to significant financial exposure associated with non-regulated operations: Alliant Energy, American Electric Power, DTE Energy, Duquesne Light, Energy East, Hawaiian Electric, NiSource, NSTAR, Pinnacle West, PPL Corp, Progress Energy, SCANA Corp., Southern Companies, and Xcel Energy.<sup>90</sup> Despite the fact that Hadaway was not aware that Aquila no longer had non-regulated operations,<sup>91</sup> he nonetheless used a comparable company screen which would include companies that derived up to 30% of their operating revenues from non-regulated operations.<sup>92</sup>

Over half (13 of 24) of the utilities in Hadaway's comparable company group are exposed to risk associated non-regulated operations. Despite the fact that he had made an upward adjustment to return on equity to account for alleged construction risk, Hadaway

---

<sup>88</sup> Tr. 345.

<sup>89</sup> Tr. 357-358 (emphasis added).

<sup>90</sup> Tr. 345-363.

<sup>91</sup> Tr. 363-364.

<sup>92</sup> Tr. 345, 361, 362.

did not provide for a similar offsetting reduction to account for the fact that Aquila is no longer exposed to risk associated with non-regulated operations.

d. Hurricanes

Finally, despite his explicit recognition that utility operations in states exposed to hurricanes are more risky as well as his insistence that such electric utilities should not be a part of his comparable company group, Hadaway admits under cross-examination that Progress Energy, SCANA Corp. and the Southern Companies are all exposed to risk associated with hurricanes.<sup>93</sup> Despite the fact that he had made an upward adjustment to return on equity to account for alleged construction risk, Hadaway did not provide for a similar offsetting reduction to account for the fact that Aquila does not face risk associated with hurricanes.<sup>94</sup>

3. Need to Account for Specific Items of Risk

The cross-examination of Mr. Hadaway readily indicates that, while he selectively focused on a single item of risk (construction budget) in an attempt to subjectively inflate the recommended return on equity for Aquila, he summarily rejected numerous other items of risk which would provide for an offsetting reduction to the recommended return on equity. In the event that the Commission endeavors to engage in selective increases to account for an individual item of risk, which Aquila's management denies even exists, it is incumbent on the Commission to account for offsetting risks (nuclear operations, non-regulated affiliates, utility operations in deregulated states, and hurricanes) that are faced by the comparable companies, but not by Aquila. In such a situation, it is likely that such

---

<sup>93</sup> Tr. 344-345.

<sup>94</sup> Tr. 345.

offsetting reductions will easily exceed the alleged risk associated with Aquila's small size or construction budget.

That said, however, SIEUA / AGP do not contend that the Commission needs to attempt to quantify each individual aspect of comparable company risk. As Dr. Morin points out, the proxy group should already encompass "firms of comparable risk." Therefore, while each individual risk may not be the same between the target and comparable companies, the overall total company risk is the same. As Gorman notes:

[S]mall company risk is part of a company's total risk. Hence, selecting companies with minimum investment grade bond ratings, and higher (more risky) than integrated electric utility average business profile score of 6, as Aquila has done, reflects the higher operating risk attributable to small utility operations. It is redundant and unnecessary to add an equity risk premium to a proxy group that already reflects the higher operating risk associated with small company operations.

As such it is unreasonable and would be redundant to add an equity risk premium to a proxy group return if that proxy group already reasonably captures Aquila's total investment risk. For example, Aquila's small company risk can be offset by differences in other risk elements. As such, focusing on a single aspect of investment risk as Dr. Hadaway proposes, rather than reviewing proxy groups on the basis of total investment risk, is inappropriate and produces unreasonable results.<sup>95</sup>

**I. What return on common equity should be used for determining Aquila's rate of return?**

Once the subjective aspects of Hadaway's analysis are realized and disregarded, an objective return on equity analysis is readily attainable. First, the constant growth or multi-stage DCF model, with "growth rate forecasts from large reputable investment research houses," results in a recommended return on equity of 9.4% for the Gorman comparable company group or 9.5% for the Hadaway group.<sup>96</sup> Second, the risk premium model, using actual, historical risk spreads (5.2%) with the 30-

---

<sup>95</sup> Exhibit 508, pages 5-6. (emphasis added)

<sup>96</sup> Exhibit 507, page 23.

year Treasury bond yield (5.0%) results in a recommended return on equity of 10.2%. Recognizing that the proxy company group adequately reflects the operational and business risk of Aquila, it is not necessary to adjust the return on equity. As such, Gorman recommends a return on equity of 9.8% to 10.0% with a conservative recommendation of 10.0%.<sup>97</sup>

In the event the Commission authorizes Aquila to recover fuel via a fuel adjustment clause a return on equity adjustment is appropriate. Realizing that Aquila's business risk is set based upon the absence of a fuel adjustment clause, and that the proxy group is comparable in risk, any actions which would cause Aquila's risk profile to drop must be quantified. It is appropriate, therefore, to adjust the authorized return on equity. In this case, a downward adjustment of 30 basis points, to 9.7%, is appropriate.<sup>98</sup>

1. Satisfaction of *Hope* and *Bluefield* standards

The *Hope* and *Bluefield* decisions provide three "standards of fairness and reasonableness of the allowed return for a public utility: (1) A standard of capital attraction; (2) A standard of comparable earnings; and (3) Financial integrity."<sup>99</sup> As Morin notes, "[t]he attraction of capital standard, which focuses on investors' return requirements, is applied through the DCF method."<sup>100</sup> Moreover, the comparable earnings standard is met through the use of a comparable company group.

The basic premise in determining a fair return is that the allowed return on equity should be commensurate with returns on investment in other firms with comparable risk, hence the need to extend the sample to firms of comparable risk. Moreover, the equity costs of other firms represent

---

<sup>97</sup> *Id.* at page 35.

<sup>98</sup> Tr. 532-533.

<sup>99</sup> Morin at page 10.

<sup>100</sup> *Id.* at page 13.

economic opportunity costs that have a direct impact on the cost of equity for the utility being studied.<sup>101</sup>

Recognizing that these two standards (comparable earnings and capital attraction) have been met through Gorman's application of the DCF model and his proxy group consisting of firms of comparable risk, the only remaining standard to satisfy is that of financial integrity. Morin notes that the financial integrity standard is met by analyzing whether the return is "high enough to produce coverages consistent with an optimal bond rating."<sup>102</sup>

In determining the bond rating of a particular utility, S&P analyzes three financial coverage benchmarks: (1) funds from operations to debt interest expense; (2) funds from operations to total debt; and (3) total debt to total capital.<sup>103</sup> In his testimony, Gorman analyzed the impact of his recommended return on each of Aquila's financial coverage metrics. Gorman's analysis indicates that his recommended return will allow Aquila to satisfy the S&P financial coverage metrics for an investment grade utility and thus, the financial integrity standard set forth by *Hope* and *Bluefield*.<sup>104</sup>

### **Rate of Return – Capital Structure**

#### **A. What capital structure should be used for determining Aquila's rate of return?**

As the Commission is undoubtedly aware, Aquila has routinely advocated the use of its hypothetical capital structure which results from its internal capital assignment process. Aquila has urged this capital structure regardless of its equity-lean consolidated capital structure. At the time it filed its direct testimony, Aquila still advocated the use of

---

<sup>101</sup> *Id.* at page 201.

<sup>102</sup> *Id.* at page 11.

<sup>103</sup> Exhibit 507, page 36.

<sup>104</sup> *Id.* at pages 36-37.

the hypothetical capital structure methodology.<sup>105</sup> In fact, Aquila notes that the use of any other capital structure would be “illogical and unfair.”<sup>106</sup> This hypothetical capital structure consists of 47.5% equity and 52.5% debt.<sup>107</sup>

In contrast, Staff and SIEAU / AGP filed testimony indicating that the hypothetical capital structure is not appropriate and that the Commission should utilize the consolidated capital structure.<sup>108</sup> Recognizing that Aquila has closed several sales of utility operations in Michigan, Missouri, Minnesota and Kansas<sup>109</sup> and that it had devoted the proceeds of these sales to the retirement of a large portion of its outstanding debt,<sup>110</sup> Aquila’s consolidated capital structure was now consistent with Aquila’s proposed hypothetical capital structure.<sup>111</sup>

With the completion of the true-up audit, Aquila has retired additional debt and their consolidated capital structure now consists of 48.17% debt and 51.83% equity. Consistent with their initial positions, SIEUA / AGP and Staff both propose to use the updated consolidated capital structure. Despite claiming that the use of any other capital structure would be “illogical and unfair,” Aquila now wants rates set on the higher level of equity in the consolidated capital structure.<sup>112</sup> In an effort to “have its cake and eat it too,” Aquila wants this equity ratio, but will not expressly reject the use of its hypothetical capital structure.

SIEUA / AGP continue to assert that the capital structure should be based upon the consolidated capital structure. As such, SIEUA / AGP do not oppose the capital

---

<sup>105</sup> Exhibit 8, page 8; Exhibit 13, page 9.

<sup>106</sup> Exhibit 14, page 11.

<sup>107</sup> Exhibit 13, page 9.

<sup>108</sup> Exhibit 221, pages 17-19; Exhibit 507, pages 9-11.

<sup>109</sup> Exhibit 8, page 13.

<sup>110</sup> Exhibit 512, page 1.

<sup>111</sup> Exhibit 507, page 11; Exhibit 221, page 18.

<sup>112</sup> Tr. 294.

structure consisting of 48.17% debt and 51.83% equity. Nevertheless, SIEUA / AGP wanted to expressly point Aquila's willingness to sell out its long-coveted hypothetical capitals structure for a mere 67 basis points of additional equity.

### **Accounting Authority Orders**

- A. Should the unamortized balance of the accounting authority orders the Commission issued for the Rebuild and Western Coal Conversion of Aquila's Sibley generating facility be included in Aquila Networks – MPS's rate base?**

SIEUA / AGP take no position on this issue.

### **Fuel Cost Recovery**

- A. What standard should the Commission use in determining whether to allow Aquila to use a fuel and purchased power adjustment mechanism?**

Missouri's 2005 General Assembly enacted Senate Bill 179, now Section 386.266 RSMo. The legislature empowered the Commission to use its informed *discretion* in authorizing a Rate Adjustment Mechanism for Missouri electric utilities. But the legislature did not intend this to be an "entitlement" as appears to be claimed by Aquila. Indeed, the explicit enactment belies such an interpretation by giving the Commission discretion to "reject" implementation of a mechanism.

The difference between arbitrary action and informed discretion is the use of a discernable standard. For that reason, a brief review of the flaws that caused the Missouri Supreme Court in 1979 to reject an implicit grant by the legislature deserve review, for the General Assembly did not legislate in a vacuum, but rather is properly taken to be aware of the Court's decision and to have incorporated those concerns in its decision to place the matter under the informed discretion of the Commission.

# 1. Problems with a “Radical Departure” from Traditional Ratemaking

In 1979, the Missouri Supreme Court issued a decision in which it discussed the Public Service Commission process and the logic underlying that process.<sup>113</sup> The Court recognized that, in a rate case proceeding, the Commission is required to consider “all relevant factors.” Thus, utility rates are not increased simply because a single cost item has increased. Rather, using the “all relevant factors” standard, an increase in one factor may be offset by “compensating economies” or decreases in other factors.<sup>114</sup> Only after considering all the relevant factors should the Commission make a decision to increase or decrease a utility’s rates. Recognizing that a fuel adjustment clause would, however, allow for a rate change based solely on a change in one factor (fuel) without allowing for any consideration of “compensating economies” or decreased in other factors, the Court noted that a fuel adjustment clause represents a “**radical departure** from the usual practice.”<sup>115</sup>

In addition to its “radical departure” from the Commission’s “usual practice,” any fuel adjustment clause suffers from several inherent deficiencies. In particular, the Court noted that the fuel adjustment clause would likely cause the utility to depart from current fuel cost minimization practices. In fact, the Court states that “utilities would lose any incentive to keep down fuel costs where they know such costs can be fully and

---

<sup>113</sup> *State ex rel. Utility Consumers Council of Missouri v. Public Service Commission*, 585 S.W.2d 41 (Mo. 1979).

<sup>114</sup> *Id.* As Johnstone notes, “[i]t is well established that certain costs may increase over time. On the other hand, it is also well established that other costs may decrease and efficiencies may be realized which can improve the utility’s overall cost profile. Under traditional regulation, this is recognized and embraced. While certain costs may increase, these cost increases can be offset by decreases in other cost items.” Exhibit 505, page 10.

<sup>115</sup> *Id.* (emphasis added). Johnstone notes, “[t]he introduction of a tracking mechanism to recover fuel costs removes some or all of the fuel costs from the traditional approach. It will thereby increase the likelihood of the utility realized improved and even excess earnings. The effect can be to allow the utility to achieve earnings based just on operations excluding fuel costs.” Exhibit 505, pages 10-11.

automatically passed on to the consumer.”<sup>116</sup> In addition, the Commission itself has recognized this fundamental flaw in the fuel adjustment clause. “[U]nder such a proposal, management would not be encouraged to bargain for the lowest coal rates possible when it would know any increase would be immediately ‘flowed through’ to customers.”<sup>117</sup> Still again, an article in Consumer Reports discusses this flaw inherent in the fuel adjustment clause.

Such pass-throughs merely provide an economic incentive for inefficiency: Utilities could purchase expensive fuel or allow other operating expenses to increase without worrying about hurting profits. In effect, they would be operating on a cost-plus basis that would insulate them from normal business risks. The consumer would bear all the risks of the utility business.<sup>118</sup>

Concerns that the fuel adjustment could lead to a departure from current fuel cost minimizations practices was cited by the Pennsylvania and Utah Commissions in rejecting proposed fuel adjustment clauses.<sup>119</sup> Others have observed that the fuel adjustment clause would constitute an unlawful delegation to the utility of the commission’s authority to regulate rates,<sup>120</sup> and that statutory mechanisms have been implemented to assure that utility rates are just and reasonable.<sup>121</sup> With this goal in mind, rate increases are not permitted until a thorough investigation of the utility’s revenues and costs is completed and the precise amount of the rate increase determined. The General Assembly obviously had these concerns in mind in requiring that a rate adjustment

---

<sup>116</sup> *Id* (citing to Foy, *Cost Adjustment in Utility Rate Schedules*, 13 Vanderbilt L.Rev. 663,664 (1959-1960); Trigg, *Escalator Clauses in Public Utility Rate Schedules*, 106 U.Pa.L.Rev. 964, 969-973 (1957-1958); Martin, *The Fuel Adjustment Clause and Its Role in the Regulatory Process*, 47 Miss.L.J. 302, 309 (1976).

<sup>117</sup> *Re Union Electric Co.*, 92 P.U.R. 3d 254, 262 (1971).

<sup>118</sup> *Consumer Reports*, November, 1974, at page 839.

<sup>119</sup> *Fox v. Pine Grove Elc. Light, Heat & Power Co.*, 1920B P.U.R. 380 (Pennsylvania Public Service Commission); *Utah Power & Light Co.*, 95 P.U.R. 390 (Utah Public Service Commission).

<sup>120</sup> *Re Rockford Electric Co.*, 1917F P.U.R. 196 (Illinois Commerce Commission); *Jones v. Montpelier Light and Power Co.*, 1921D P.U.R. 145 (Vermont Public Service Commission).

<sup>121</sup> Section 393.150 RSMo.

mechanism could only be implemented in a general rate case where these relevant factors could all be considered.

Another criticism is that the fuel adjustment clause would confuse the customer. These critics assert that customers have a right to know their utility rates with certainty in advance.<sup>122</sup> Only by providing these rates with certainty can the customer make appropriate decisions regarding budgeting, conservation, or even fuel switching. Recognizing that the fuel adjustment clause may lead to indeterminate increases or decreases in electric rates, customers are not able to plan accordingly.

Still again, some utility commissions have asserted that the public should always have an opportunity to be heard prior to any utility rate increase.<sup>123</sup> As pointed out previously, the change in rates occasioned by the increase in fuel prices under the fuel adjustment clause is automatic. It does not provide for public comment in advance of the rate change. As such, it appears to violate a fundamental tenet of utility regulation – the right to be heard.

Finally, many critics note that the fuel adjustment clause adds another level of complexity to current regulation that cannot be accounted for with current staffing levels.<sup>124</sup> “[U]nderstaffed staff commissions, flooded with requests for rate increases, can’t check the details of these enormously complex transactions.”<sup>125</sup> As such, fuel and purchased power increases are likely recovered from consumers without any significant regulatory scrutiny.

---

<sup>122</sup> Section 393.140(11) RSMo.

<sup>123</sup> *Great Falls Gas Company*, 29 P.U.R.3d 237 (Montana Public Service Commission).

<sup>124</sup> *The Fuel Adjustment Clause and its Role in the Regulatory Process*, 47 Mississippi Law Journal 302, 312.

<sup>125</sup> *Consumer Reports* at 838.

While the Commission, the courts, and other erudite institutions have opined as noted above, this is not rocket science that is beyond everyday people. Indeed, it is a common sense issue that is understood by the public -- the customers of Aquila. The breadth of the understanding and concern is reflected in the opposition from AARP, OPC, Staff, SIEUA, AGP, and the Federal Executive Agencies. The clarion call is this. Automatic fuel adjustments are universally recognized for their perverse incentives that are bad news for consumers. No amount of oversight, however well intentioned, can replace properly directed incentives. If there is to be a FAC, the retention of as much of the traditional ratemaking incentives as possible is a key to limiting the damage to consumers.

## 2. Commission Discretion and Suggested Standard

Given all the flaws inherent in the Aquila fuel adjustment clause, it is unquestionable the proposed mechanism would provide for bad ratemaking. That said, however, the 2005 General Assembly promulgated legislation which provided the Commission with **authority to implement** a fuel adjustment clause.<sup>126</sup> Rather than dictate the standard by which the Commission should determine whether to authorize a fuel adjustment clause, the General Assembly instead set a few threshold findings that would be required, but otherwise left the matter entirely to the discretion of the Commission. Specifically, Section 386.266.4 provides the Commission with the broad latitude to “approve, modify, or reject” a fuel adjustment mechanism after “considering all relevant factors which may affect the costs or overall rates and charges or the corporation.”

Given that this is the first proceeding in which the Commission will have the opportunity to address a standard by which a fuel adjustment mechanism will be judged

---

<sup>126</sup> Section 386.266 RSMo.

and possibly implemented, SIEUA / AGP filed expert testimony suggesting such a standard. It is unquestioned that traditional regulation has served Missouri well. In fact, in its annual report, the Missouri Commission touts that “electric rates for Missouri’s residential, commercial and industrial customers continue to be among the lowest in the nation.” This sentiment is furthered in the testimony of Aquila Sr. Vice President Empson.<sup>127</sup>

Recognizing that traditional regulation has served Missouri’s residential, commercial and industrial customers well, while still providing for financially healthy electric utilities, any deviation should be the exception, not the rule. Nonetheless, SIEUA / AGP does believe that situations may arise in which the Commission may find it appropriate to deviate from the obvious benefits of traditional ratemaking and, instead, implement an adjustment mechanism. Such instances would likely focus on situations in which extenuating circumstances cause a substantial or sharp financial need for the utility. As such, SIEUA / AGP suggest that the Commission implement a standard of “acute need.”<sup>128</sup> It is important that the standard of “acute need” be differentiated from the earnings test advanced by parties in other proceedings. The “acute need” standard proposed by SIEUA / AGP does not strictly correlate to any specific earnings level or authorized return on equity. As SIEUA / AGP witness Johnstone points out there are many relevant factors to be considered in the Commission’s deliberations, including the provisions of the proposed FAC:

Consequently, Aquila, before shifting the burden of volatility directly to customers, ought to first be required to demonstrate a need and then that need must be weighed against the negative effects of the proposed FAC. Among the negative effects are rate volatility, unpredictable utility bills,

---

<sup>127</sup> Exhibit 8, pages 3-6.

<sup>128</sup> Exhibit 505, page 9.

reduced incentives for the utility to achieve low and stable costs, distorted investment incentives, and the complexities of the rate administration. Any rate adjustment mechanism should be approved only if the need is acute and the negative effects are reasonably mitigated. Of course, a design that mitigated the negative effects would be preferable to one that did not do so.”<sup>129</sup>

In this regard, therefore, the word “acute” simply means that Aquila’s need for the FAC, as specifically proposed by Aquila or any other party, must outweigh the substantial negative effects of deviating from traditional regulation.<sup>130</sup>

This standard will ensure that Missouri’s ratepayers and the Missouri economy will continue to benefit from traditional ratemaking wherever possible, but will allow for instances of deviation based on a utility’s need. Further, the provision of aggressive mitigation of the FAC’s negative effects (or the lack thereof in the case of the Aquila FAC proposal) should also weigh in the decision.<sup>131</sup>

### 3. Aquila’s Lack of Standard and Failure to Prove Need

Unlike SIEUA / AGP which asserts that traditional ratemaking should be the norm with fuel adjustment mechanisms the exception to be authorized in times of “acute need,” Aquila seeks to completely disavow the use of traditional ratemaking as it applies to the recovery of fuel and purchased power. Aquila attempts to reduce Commission discretion to a *de minimus* level by asserting that a utility must only show compliance with certain SB179 threshold requirements for Commission findings and the Commission’s rules in order to implement a fuel adjustment clause.<sup>132</sup> In this way, adjustment mechanisms would become the norm, rather than the exception. As the

---

<sup>129</sup> Exhibit 503, page 3.

<sup>130</sup><sup>130</sup> Public Counsel appears to argue a similar balancing test when it discussed the need “to estimate the net impact on consumers of approving an FAC application.” Exhibit 401, page 14.

<sup>131</sup> Exhibit 505, page 9.

<sup>132</sup> *Id.* at page 43.

testimony of AARP witness Brockaway shows, however, the abandonment of traditional ratemaking carries a steep price.<sup>133</sup> But in another sense Brockaway merely gives another authoritative voice to the virtually universal opposition to the Aquila proposal.

Interestingly, while taking its hard line stand against the exercise of Commission discretion and the implementation of any standard, Aquila nevertheless appears to suggest that a FAC standard is actually necessary. In fact, Aquila agrees that the Commission must judge each utility and fuel adjustment request on their own merits.<sup>134</sup> The ability to distinguish between each utility and each proposed fuel adjustment mechanism, however, can only occur with the development and consistent application of a standard founded on relevant facts.

The Public Service Commission was established in order to exercise a degree of regulatory expertise that could not be expected of the General Assembly. Clearly, the General Assembly, by providing the Commission with discretion in this matter, envisioned the exercise of such regulatory expertise instead of mindless pacification of the utility's desires. It is this degree of expertise that Missourians expect from its Commission. The tough job is distinguishing those situations in which deviation from traditional regulation, and the benefits contained therein, is truly appropriate. The "acute need" standard will guide the Commission in its analysis. The need should be real, the extent of the need should be demonstrated, the mechanism must be thoughtfully designed to minimize unintended negative effects on consumers, and the potential to eviscerate

---

<sup>133</sup> Tr. 850-851. Brockaway notes that the abandonment of traditional ratemaking may have been a driving factor in the high electric rates currently experienced in New England. Of particular note, Massachusetts has recently passed Hawaii for the honor of having the highest electric rates in the country with a residential retail rate of 20¢ / kwh. (Tr. 849).

<sup>134</sup> Aquila Prehearing Brief at page 38.

traditional incentives must be considered. All of these considerations are to be deliberated in the context of the acute need standard as recommended by Mr. Johnstone.

Aquila in its presentation talks about historic fuel price volatility, but makes no showing of future need or impact. No one has quantified the extent of the possible impact on future earnings. The Commission should not allow itself to be persuaded by the empty rhetoric of Aquila. Apart from any proof of need, Aquila utterly fails to even illustrate the extent of fuel cost changes on its earnings. Aquila has the burden of proof, a burden it has ignored in every substantial sense.

**B. Should the Commission authorize Aquila to use a fuel and purchased power recovery mechanism allowed by 4 CSR 240-20.090?**

The evidence indicates that Aquila's proposed FAC fails to meet even the lowest standards for demonstrating need and for adequately mitigating the negative effects on ratepayers. Ideally the interests of ratepayers would be aligned. Aquila disregards this goal and instead opts for a proposal purely driven by its own pecuniary interests – let the buyers beware! Aquila has utterly failed to provide any evidence showing a prospective need for a fuel adjustment mechanism. Instead, focusing on the historical earnings shortfall that resulted from hurricane driven natural gas prices, Aquila provides little information for the Commission to judge prospective need.<sup>135</sup> In fact, Mr. Williams' surrebuttal reproduces an Aquila schedule that illustrates that gas prices are just as likely to go down as they are to go up. Yet Aquila's one-sided presentation of history would have the Commission believe that rates are on a one way trip up.

---

<sup>135</sup> As Johnstone notes, "Aquila cites its recent history of fuel and purchased power costs and its several rate cases. . . . However, I do not find a quantification of the impact on earnings. Furthermore, there is no discussion of the future of fuel prices and the future impact on earnings. By necessity, rates must be set on a forward-looking basis and it is therefore important to adduce whatever information is available with respect to the future before undertaking such a major change in regulation." Exhibit 505, pages 5 and 7.

Moreover, Aquila's proposed FAC fails to propose any mechanisms designed to mitigate any of the negative effects of adjustment mechanisms. Aquila, after all, is looking after the interests of Aquila alone. Specifically, while easily accomplished, Aquila failed to design its fuel adjustment proposal: (1) to mitigate rate volatility; (2) to make utility bills more predictable; (3) to preserve incentives for the utility to achieve low and stable costs; or (4) to minimize the distortion of investment incentives.

1. Acute Need Standard

a. Rate Volatility

In its proposed FAC tariff, Aquila proposed to accumulate historical fuel and purchased power costs over a three-month period. Once accumulated, these historical costs would then be recovered over a three-month recovery period. As Johnstone notes, however, "a three-month accumulation period does little to mitigate volatility."<sup>136</sup> The volatility is further aggravated by Aquila's use of a three-month recovery period.

Aquila proposed three-month recovery periods. In effect, summer costs would be collected in winter and winter costs would be collected the following summer. The same is true with respect to spring and fall. Since there can be significant differences in a retail kilowatt hour sales between the four periods of the year, the effect of volatility in costs can be magnified if there is a large variation in one period and the variations are collected in a period with fewer kilowatt hour sales. The impact of the cost variations is necessarily magnified. This is a serious negative effect of the Aquila proposal.<sup>137</sup>

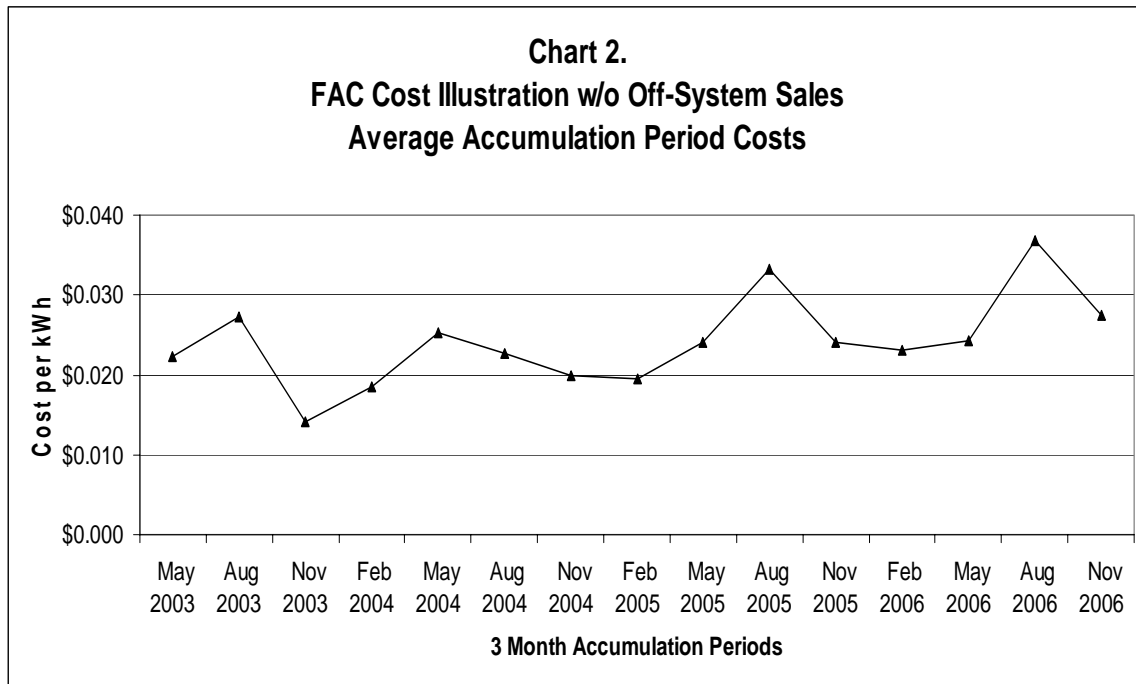
In surrebuttal testimony Aquila moved to a twelve-month recovery period, but maintained the three-month accumulation periods. The following chart from the rebuttal

---

<sup>136</sup> *Id.* at page 6.

<sup>137</sup> *Id.* at pages 22-23.

testimony of Mr. Johnstone illustrates the inherent volatility of the three month accumulation periods.<sup>138</sup>



**b. Unpredictable Utility Bills**

The failure to adopt any volatility mitigation measures necessarily results in unpredictable utility bills. This unpredictability is enhanced by Aquila’s failure to consider or propose any type of rate cap for the deferral of historical fuel and purchased power costs. As Johnstone notes, “[u]nder the Aquila proposal there is no cap whatsoever on the size of any increase in retail rates.”<sup>139</sup> The implementation of a soft cap would provide the effect of limiting “the immediate increase, but to provide for the

<sup>138</sup> *Id.* at page 7.

<sup>139</sup> *Id.* at page 24.

intended recovery through an extended recovery period while providing interest to Aquila to compensate it for the carrying costs.”<sup>140</sup>

c. Reduced Incentives to Achieve Cost Minimization

As proposed the Aquila FAC would provide for 100 percent, dollar-for-dollar recovery of the costs incurred for fuel and purchased power.<sup>141</sup> Johnstone notes, however, that a 100 percent pass through of such costs “completely eliminates an important incentive to low cost efficient operations.”<sup>142</sup> This concern is echoed by Staff Witness Featherstone, “[a] total pass-through fuel clause, the type being proposed by Aquila in this case, does not provide the necessary incentives to keep fuel costs as low as possible.”<sup>143</sup> A better approach, then would be a mechanism that “would maintain all or a substantial measure of the traditional incentive” for the utility to minimize its fuel costs.<sup>144</sup>

d. Distorted Investment Decisions

Under traditional regulation, utilities are encouraged to make investment decisions that will minimize long-term fuel costs. Further, the motivation to minimize total costs engendered by traditional base rate regulation should lead to the best mix of high capital cost / low operating cost baseload generating facilities with low capital cost / high operating cost intermediate and peaking facilities. Under Aquila’s proposed 100 percent pass through fuel adjustment proposal, Aquila will no longer have the same incentives. Instead, armed with an ability to pass through all fuel costs, the incentive would be to forego high capital cost facilities and, instead, focus on low capital costs (since the high

---

<sup>140</sup> *Id.*

<sup>141</sup> *Id.* at page 3.

<sup>142</sup> *Id.* at page 4.

<sup>143</sup> Exhibit 207, page 6.

<sup>144</sup> Exhibit 505 at page 12.

generating cost of gas facilities would automatically be recovered). Worse still, the utility may completely forego all capital costs by resorting entirely to the purchased power market. These perverse incentives are worrisome for any utility, but for Aquila with its documented reliance of purchased power, the concern could rise to outright fright.<sup>145</sup> As Public Counsel witness Kind points out:

Most of the fuel and purchased power cost volatility that Aquila faces at this time is the result of poor resource planning decisions that go at least as far back as Aquila's decision to build the Aries plant. . . . Aquila saw meeting the resource needs of its regulated Missouri customers as an opportunity to generate profits for its non-regulated operations. Aquila's resource planning process and the decisions that resulted from its have continued to flounder since that time. Aquila was required to submit a resource plan to Staff and OPC in 2005 and the plan that was submitted was not a credible effort. It was seriously lacking in several areas including the range of resources that were considered, the demand-side analysis, the range of alternative plans considered and the risk and integrated analysis that was performed.<sup>146</sup>

The facts speak for themselves. What defense could there possibly be for using a standard less than acute need?

## 2. Legal Impediments to a Fuel Adjustment Clause

In addition to Aquila's failure to consider even the most basic mitigation measures necessary to protect consumers under any need-driven standard, the Aquila fuel adjustment proposal fails to comply with the provisions of Section 386.266 or the Commission's fuel adjustment regulations. Section 386.266.12 provides that the Commission shall previously promulgate rules to implement the application process prior to issuing an order for any rate adjustment. Consistent with this dictate, the Commission promulgated 4 CSR 240-3.161 and 4 CSR 240-20.090. Certain features required of any fuel adjustment proposal are the following:

---

<sup>145</sup> See, Exhibit 217.

<sup>146</sup> Exhibit 401, page 11.

- (1) The FAC should only pass-through “prudently incurred fuel and purchased power costs.”<sup>147</sup>
- (2) The FAC “shall reflect differences in delivery of electricity at different voltage levels.”<sup>148</sup> In order to accomplish this requirement, the utility is required to “conduct a Missouri jurisdictional system loss study within twenty-four (24) months prior to the general rate proceeding in which it requests its initial RAM.”<sup>149</sup>
- (3) The electric utility “shall file a proposed schedule and testing plan with written procedures for heat rate tests . . . to determine the base level of efficiency for each of the units.”<sup>150</sup>
- (4) The electric utility “shall file a complete explanation of all the costs that shall be considered for recovery under the proposed RAM and the specific account used for each cost item on the electric utility’s books and records.”<sup>151</sup>

a. Aquila’s FAC proposal allows for pass-through of imprudent costs

As indicated, Section 386.266.1 and 4 CSR 240-3.161(2)(L) contemplate that an adjustment mechanism will be designed to “ensure that only prudent costs shall be eligible for recovery.” While Aquila clearly points out that its fuel adjustment clause will “insure that customers pay only the costs actually incurred,”<sup>152</sup> it fails to ensure that those costs are prudent prior to passing the costs on to customers. Rather, Aquila clearly contemplates that any prudence review will occur after the actual historical costs (regardless of any prudence or lack thereof) have been paid by the consumers.<sup>153</sup>

In fact, reliance on the after-the-fact prudence review would inevitably allow the utility to recover certain costs that are imprudent. For instance, on July 7, 2000, the

---

<sup>147</sup> Section 386.266.1. Similarly, 4 CSR 240-3.161(2)(L) provides for “a complete explanation of any feature designed into the proposed RAM or any existing electric utility policy, procedure, or practice that can be relied upon to ensure that only prudent costs shall be eligible for recovery under the proposed RAM.”

<sup>148</sup> 4 CSR 240-20.090(9)

<sup>149</sup> *Id.*

<sup>150</sup> 4 CSR 240-3.161(2)(P)

<sup>151</sup> 4 CSR 240.3.161(2)(H)

<sup>152</sup> Exhibit 32, page 6.

<sup>153</sup> *Id.* at page 8, See also, Tr. 625.

Aquila Lake Road unit turbine failed and caught fire. Evidence indicated that damage resulted from Aquila's failure to properly test the unit prior to placing in service. As a result, Aquila incurred approximately \$7.1 million of incremental replacement energy costs.<sup>154</sup> Despite Aquila's request for an Accounting Authority Order, the Commission did not allow the utility to recover its costs of replacement power from ratepayers. Similarly, the Commission is very familiar with Ameren's recent problems with its Taum Sauk pumped storage facility. Under either situation, had the provisions of Aquila's fuel adjustment clause proposal been in effect, those utilities would have been permitted to pass the cost of replacement power to ratepayers.<sup>155</sup> This situation could only have been rectified years later by the after-the-fact prudence review.<sup>156</sup> Nevertheless, it is clear that Aquila's FAC proposal does not include provisions to ensure that only prudently incurred costs are recovered from ratepayers. Clearly, Aquila's proposal does not comply with the authorizing statute or the implementation regulations inasmuch as it will only give back money if consumers can detect and prove the companies imprudence.

b. Prudence Reviews are not adequate protections

In support of its adjustment mechanism, Aquila is continually heard to tout the effectiveness of the after-the-fact prudence review.<sup>157</sup> Aquila, relying on the Commission's familiarity with prudence reviews in the PGA setting, would have this Commission believe that such after-the-fact reviews are enough to promote purchasing and operational practices that would minimize costs as well as ensure prudence. Evidence provided clearly indicates that prudence reviews, especially as they apply to

---

<sup>154</sup> See, *Report and Order*, Case No. EO-2000-0845 (issued December 14, 2000).

<sup>155</sup> Tr. 625.

<sup>156</sup> *Id.*

<sup>157</sup> Tr. 586.

electric utilities, are inadequate and virtually impossible.<sup>158</sup> “It is much more complicated in the electric industry because there are hundreds and thousands of decisions that the electric utility has control over.”<sup>159</sup> In fact, the New Hampshire Commission could not adequately conduct such prudence reviews on their own, but instead “had to go out in electric cases and get independent expertise because it required an engineering expertise that it was hard to get on Staff.”<sup>160</sup>

While the true-up audit of actual costs of the fuel clause are always touted as the safeguard that will allow only prudent costs to be recovered, the reality is that it is extremely difficult to impose the standard of prudence relating to plant operations and procurement of fuel and energy supply. In order to make those determinations, an exhaustive review of the fuel and purchased power costs would have to be undertaken to identify the type of issues relating to imprudent behavior concerning plant operating and fuel supply procurement problems. It is simply “easier said than done” to make adjustments for imprudence and hold the line on escalating fuel and purchased power costs.<sup>161</sup>

This lack of any prudence review is not surprising given the number and complexity of decisions made in the electric industry on a routine basis. For instance, electric utilities must make decisions regarding the generation of electricity, the availability and operation of units, and the purchase of electricity.<sup>162</sup> Recognizing the constantly changing availability of purchased power as well as the cost of that power, the electric utility must continually assess and compare their cost of generation versus the newly changed cost to purchase power.<sup>163</sup> These decisions would not only be made in real-time, but also must be assessed in the day-ahead market or, in the event of bilateral

---

<sup>158</sup> Exhibit 505, pages 13-14; Exhibit 207, page 7.

<sup>159</sup> Tr. 879.

<sup>160</sup> Tr. 880.

<sup>161</sup> Exhibit 207, page 7.

<sup>162</sup> Tr. 588-590.

<sup>163</sup> Tr. 590-591.

contracts, even further in the future.<sup>164</sup> Similar to the decisions to purchase power, a similar number of decisions must be assessed in order to determine whether to sell power either through a bilateral contract, in the day-ahead market, or on a spot basis.<sup>165</sup> In a single year, the number of decisions that must be analyzed for prudence would amount to hundreds or thousands.<sup>166</sup>

The number of decisions extends beyond these operational matters. Additional matters include purchasing and procurement decisions including the cost and quantity of long-term or spot coal, the reservation of rail capacity for shipment of coal, the cost and quantity of long-term or spot natural gas, the reservation of capacity on the pipeline for the delivery of natural gas, the labor costs underlying fuel handling, and the cost and extent to which the company hedged their gas costs.<sup>167</sup>

Given the millions of decisions, any prudence review would be virtually impossible. In fact, in Michigan, which has operated under a fuel adjustment clause for decades, Aquila's witness couldn't remember a single prudent review in the 14 years he was associated with that Commission.<sup>168</sup> Clearly then, the task of preparing and analyzing such a prudence review is so daunting that the Michigan Commission, despite the millions of decision points faced each year by its electric utilities, was never confronted with such an issue in over 14 years. More worrisome, even where the New Hampshire Commission thought that it could successfully raise a prudence issue, it was enjoined from taking such action.<sup>169</sup>

---

<sup>164</sup> Tr. 591.

<sup>165</sup> Tr. 591.

<sup>166</sup> Tr. 591-592. Amazingly, Mr. Fetter does not find the prospect of assessing prudence on hundreds of thousands of decisions to be a daunting matter. (Tr. 592).

<sup>167</sup> Tr. 722-726.

<sup>168</sup> Tr. 588.

<sup>169</sup> Tr. 883.

Despite all these complexities and virtual impossibilities, it is the possibility of these prudence reviews that Aquila touts as protecting its ratepayers.<sup>170</sup> Clearly there is something better. By maintaining such sharing of costs between treatment in the fuel adjustment clause and treatment in base rates, the Commission is able to preserve those current financial incentives for the Company to act in a prudent fashion.<sup>171</sup>

c. Lack of timely line loss study

4 CSR 240-20.090(9) provides that any fuel adjustment clause shall be designed to “reflect differences in losses incurred in the delivery of electricity at different voltage levels for the electric utility’s different rate classes.” In order to accomplish this requirement, the Commission mandated, in the same rule, that “the electric utility shall conduct a Missouri jurisdictional system loss study within twenty-four (24) months prior to the general rate proceeding in which it requests its initial RAM.”

The evidence in this case unquestionably demonstrates that Aquila has not conducted a timely jurisdictional system loss study. Rather, the evidence reveals that Aquila’s latest loss study was conducted in its 2002 rate design proceeding.<sup>172</sup> Clearly, a five year old study does not satisfy the requirements of 4 CSR 240-20.090(9).

d. Lack of heat rate testing

4 CSR 240-3.161(2)(P) provides that the electric utility shall file “a proposed schedule and testing plan with written procedures for heat rate tests . . . to determine the base level of efficiency for each of the units.” This heat rate testing is necessary to

---

<sup>170</sup> In cross-examination Aquila admitted that, given the pending merger agreement with Great Plains Energy, it would no longer execute coal contracts without the express approval of its merger partner. (Tr. 657). This necessarily raises concerns about whether Aquila is currently operating with a view towards least cost generation or with a view towards closing its pending merger agreement. Apparently the fear of a prudence review is not enough to ensure that Aquila will act appropriately even if its merger partner has inconsistent desires.

<sup>171</sup> See Section C, *infra*.

<sup>172</sup> Tr. 623.

develop a baseline line of efficiency to ensure that the utility continues to operate at such a level. “[H]eat content, thermal, generating and delivery efficiency and other technical factors should be carefully considered in advance of any adjustment of electric rates for increased fuel expense.”<sup>173</sup> As Staff indicates, this additional testing and filing requirement is necessary because the same incentives that exist under traditional ratemaking, to control fuel and purchased power costs, to not exist under an adjustment mechanism.<sup>174</sup>

As Staff testimony indicates, however, Aquila has not complied with this requirement.<sup>175</sup> Absent such detailed written procedures to ensure this base level of efficiency, Aquila does not comply with the Commission’s regulation and can not be authorized an adjustment mechanism.

e. Lack of detailed explanation of includable costs

As indicated, *supra*, an electric utility is required to provide “a complete explanation of all costs that shall be considered for recovery” under the fuel adjustment clause.<sup>176</sup> Aquila’s proposed adjustment mechanism fails to provide this “complete explanation” except to include all expenses recorded in FERC accounts 501, 509, 547 and 555.<sup>177</sup> This lack of “complete explanation” raises inevitable questions and disputes regarding the inclusion of actual replacement power even if due to imprudence, an already insured loss, or an insurable loss, (i.e., power purchased to replace generating unit outages caused by utility negligence (e.g., Aquila’s Lake Road unit or Ameren’s Taum

---

<sup>173</sup> 13 Vanderbilt Law Review 663, 674 (citing to *Pennsylvania Public Utilities Commission v. Metropolitan Edison Co.*, 13 P.U.R. 3d 29).

<sup>174</sup> Exhibit 227, page 5.

<sup>175</sup> *Id.*

<sup>176</sup> 4 CSR 240-3.161(2)(H).

<sup>177</sup> Exhibit 32, page 3.

Sauk unit)),<sup>178</sup> purchased power demand costs, and emission allowances. Absent such a “complete explanation,” Aquila has not complied with the express requirements of the Commission’s rules.

**C. What portion of fuel and purchased power costs should be recovered by a recovery mechanism rather than by base rates?**

As was demonstrated, *supra*, the pass-through of 100% of fuel and purchased power variations results in several unintended consequences. Specifically, the Aquila proposal results in excessive rate volatility, unpredictable utility bills, reduced incentives for the utility to achieve low and stable costs, and distorted investment incentives. Many of these deficiencies can be minimized by seeking to retain certain aspects of traditional ratemaking. In this regard, several of the parties suggest that, in the event that the Commission authorizes an adjustment mechanism, that 50% of any variations in fuel be considered for pass-through under the fuel rider. In this light, the remaining 50% would be treated pursuant to traditional ratemaking.<sup>179</sup> By this simple sharing mechanism, the utility retains the important incentive “to operate in more than just a **prudent** manner. It maintains an incentive to operate in an **efficient** manner.”<sup>180</sup>

This sharing mechanism is not a novel concept. Rather, the logic of the sharing mechanism aspect is so obvious; it has been in existence for over thirty years.

Such pass-throughs merely provide an economic incentive for inefficiency: Utilities could purchase expensive fuel or allow other operating expenses to increase without worrying about hurting profits. In effect, they would be operating on a cost-plus basis that would insulate them from normal business risks. The consumer would bear all the risks of the utility business. One suggested solution is to allow only a partial

---

<sup>178</sup> Tr. 623-625.

<sup>179</sup> Exhibit 505, page 14.

<sup>180</sup> *Id.* at page 16.

pass-through, thus preserving an incentive for efficiency and hard bargaining.<sup>181</sup>

In addition, the sharing mechanisms application to an adjustment clause is more than academic discussion. On April 7, 2005, the Arizona Corporation Commission issued its decision in which it implemented an incentive mechanism by which costs and savings are shared between the company and customers.<sup>182</sup> Similarly, the Washington Utilities and Transportation Commission implemented a sharing mechanism with regards to the Power Cost Adjustment Mechanism of Puget Sound Energy.<sup>183</sup> Still again, the Wyoming Commission implemented a sharing grid for Rocky Mountain Power's Power Cost Adjustment Mechanism.<sup>184</sup>

Clearly, the implementation of a sharing mechanism, such as that proposed by Mr. Johnstone represents a reasonable middle ground in that it provides the utility protection against volatility in fuel and purchased power costs while still preserving the incentive for the utility to operate in a low cost fashion.

**D. Should a fuel and purchased power adjustment mechanism include recovery of any demand costs?**

The Commission should exclude the consideration of demand costs from any adjustment mechanism for three reasons. First, SB179 was clearly enacted to provide the Commission the authority to implement adjustment mechanisms focused on volatile fuel and purchased power costs between rate proceedings. In this regard, demand costs associated with purchased power agreements do not demonstrate the volatility that

---

<sup>181</sup> *The Fuel Adjustment Clause and It's Role in the Regulatory Process*, 47 Mississippi Law Journal 302, 310 (1976).

<sup>182</sup> *Re Arizona Public Service Company*, 241 P.U.R. 4<sup>th</sup> 181 (Arizona, April 7, 2005).

<sup>183</sup> *Washington Utilities and Transportation Commission v. Puget Sound Energy*, 2002 Wash. U.T.C. 91 (Washington, June 20, 2002).

<sup>184</sup> Exhibit 600, Schedule RJB-3.

justified passage of SB179. (In fact, in its discussion of fuel costs, Aquila admits that most fuel costs, other than natural gas, are “relatively stable.”)<sup>185</sup> Given the relative stability of the purchased power demand costs, it is a straightforward matter to include a normalized level of demand costs in any rate proceeding. Second, because demand costs do not reflect the volatility of natural gas prices, there is no need to include such costs in Aquila’s FAC. Third, it is well established that any adjustment mechanism should only reflect those costs which vary according to the energy generated. “The expense should bear a direct relation to the volume of business done; otherwise, the adjustment cannot be made so as to recover for the utility precisely the increase which has occurred in operating costs.”<sup>186</sup> Therefore, while fuel costs will increase with the amount of energy generated, demand costs do not. Finally, the inclusion of demand costs in a fuel adjustment clause will undermine the long term planning focus of the Commission’s IRP rule by motivating the company to rely on purchased power agreements rather than constructing generation facilities. It would be foolish to even suggest that the entirety of the IRP process should be undertaken as part of every annual prudence review, but yet that would be needed to ensure the prudence of these costs.

**E. Should a fuel and purchased power adjustment mechanism require definitive production standards for recovery of fuel and purchased power costs via the mechanism?**

In Section (B)(1) of this brief, SIEUA / AGP discussed many of the detriments generally associated with implementation of a fuel adjustment mechanism. Included in the litany of problems are: (1) reduced incentives to achieve cost minimization and (2) distorted investment decisions. Other issues arising under Aquila’s specific proposal are

---

<sup>185</sup> Exhibit 24, pages 20-21.

<sup>186</sup> *Cost Adjustment in Utility Rate Schedules*, 13 Vanderbilt Law Review 663, 670 (citing to *South Carolina Generating Co.*, 23 P.U.R. 3d 499, 508).

flow-through of (1) imprudent costs and (2) insured or insurable replacement power costs. Each of these problems can either be eliminated or mitigated through the imputation of performance standards in any adjustment mechanism. As described by Mr. Johnstone:

Under traditional base rate regulation, Aquila bears the brunt of the additional cost if there is an outage in one of its lower cost base load generating units. The additional costs that I am referring to in particular are the fuel and purchased power costs that are incurred when the low-cost generation is replaced with higher cost generation during the period of an outage. . . . Recognizing that the FAC is designed to address recovery of volatile aspects of the utility's cost structure and is not designed to provide protection against unplanned unit outages, I recommend simple standards be applied to the entire fleet of coal-fired generation.<sup>187</sup>

In this case, during each accumulation period a generation threshold consisting of 2,598 Gwh (for January through June) or 2,799 Gwh (for July through December) of coal-fired energy generation will be assumed to exist.<sup>188</sup> This level of imputed-generation primarily protects ratepayers against extended outages at Aquila's low-cost Sibley and Iatan units. Recognizing that Aquila's own generation forecasts project annual low-cost generation in each of the next five years that exceeds this threshold,<sup>189</sup> this level of coal-fired generation should not only be attainable, but routinely beatable.

Used in conjunction with the previously discussed sharing mechanism, Aquila will be better off if it can improve efficiencies at these units and generate more of the low-cost energy. This ability to profit from any improvements does not, however, carry with it the inverse correlation that Aquila will suffer from any shortfalls. Rather, any shortfalls would be treated in the context of traditional ratemaking. In that instance, the

---

<sup>187</sup> Exhibit 505, pages 16-17. (emphasis added).

<sup>188</sup> *Id.* at Schedule 1, page 3. Similar thresholds would be attached to the low-cost purchased power from the Cooper nuclear unit. (Exhibit 505, page 20).

<sup>189</sup> Exhibit 24, Schedule HDR-8.

shortfall will be subjected to an up-front prudence review and recovery determined at that time.<sup>190</sup>

**F. FAC: If the Commission authorized Aquila to use a fuel adjustment clause, how should it be structured?**

**1. What recovery period should be used in the FAC?**

As indicated previously, the implementation of a fuel adjustment clause will inevitably shift the volatility reflected in the price of fuel and purchased power from the utility to the ratepayer. This shift of volatility will hinder the ratepayers' ability to accurately predict and budget the amount of their monthly electric bill. As such, the Commission should explore all options to mitigate such volatility.

In his testimony, Mr. Johnstone recommends that any adjustment mechanism be modified to extend the three-month recovery period suggested by Aquila to twelve-months. This has the additional feature of eliminating any seasonal impacts. "I recommend twelve-month recovery periods. This will have the beneficial effect of spreading out cost variations over a slightly longer period, thereby mitigating the rate impacts. In addition, cost variations are not moved from one season to another, but rather spread over a twelve-month period."<sup>191</sup> As reflected, the smoothing effect of the longer recovery period is apparent.<sup>192</sup>

Faced with the indisputable logic of the extended recovery period, Aquila conceded that a twelve-month recovery period is appropriate.<sup>193</sup> In the event that the Commission implements an adjustment mechanism, it should provide for the extended recovery period which eliminates any seasonal impacts.

---

<sup>190</sup> Exhibit 505 at page 19.

<sup>191</sup> *Id.* at page 23.

<sup>192</sup> *Id.* at pages 28 and 29.

<sup>193</sup> Tr. 622-623.

2. How often should the fuel adjustment clause be adjusted?

In addition to the volatility that can be mitigated through the extended recovery period, additional volatility can be eliminated by lessening the frequency of any adjustments (i.e., increasing the length of the recovery period). Currently, Aquila proposes to accumulate any differences between costs collected in rates and those actually incurred over a three-month period. The short length of this accumulation period does not provide any significant opportunity for a market correction to alleviate previous changes. That is to say, while offsetting changes inevitably occur, it is far less likely that an offsetting decrease in price can occur in the same three-month period as a fuel price increase. As a result, Aquila's ratepayers will realize excessive volatility in their electric rates.

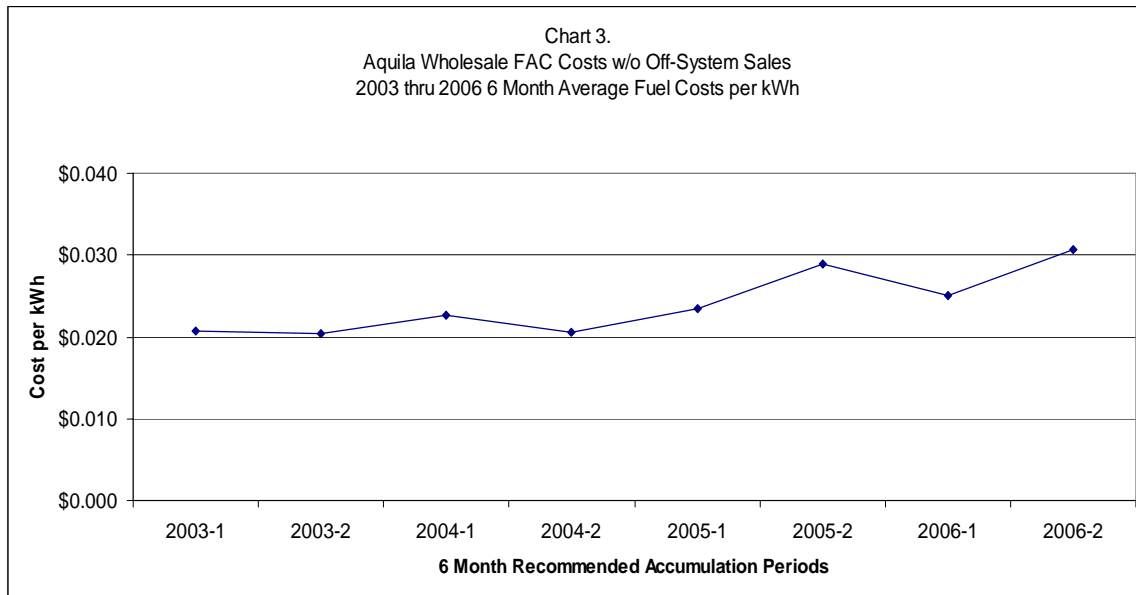
Some of this price volatility can be mitigated by decreasing the number of adjustments from four per year to two per year (i.e., extending the accumulation period to 6 months). As Johnstone notes, "[i]t is possible to have a moderating effect on rate volatility by extending the period in which the variations and costs are accumulated. I recommend an extension to a six-month period. This will allow for some averaging of highs and lows in cost over the accumulation period."<sup>194</sup> Johnstone's logic is consistent with other's findings. "The use of a longer base period has the advantage of demonstrating that the increase or decrease in fuel or gas costs has become definitely established."<sup>195</sup> The following Chart 3 from the rebuttal testimony of Mr. Johnstone

---

<sup>194</sup> *Id.* at page 22.

<sup>195</sup> *Cost Adjustment in Utility Rate Schedules*, 13 Vanderbilt Law Review 663, 673.

illustrates the relatively lower volatility of six month accumulation periods. Note the more gradual nature of the changes as compared to Chart 2 above.<sup>196</sup>



3. Should the fuel adjustment require a phase-in (cap) for sharp changes in fuel or purchased power costs?

One additional volatility mitigation measure is the implementation of a rate cap on the magnitude of any price increases. As Johnstone suggests, “I recommend what is sometimes described as a “soft cap.” The effect of a soft cap is to limit the immediate increase, but to provide for the intended recovery through a 24-month recovery period while providing interest to Aquila to compensate it for the additional carrying cost.”<sup>197</sup> Specifically, Johnstone’s proposes a cap of 1.5% for each 6 month accumulation period, thus limiting rate increases to 3% per year (exclusive of the impact of deferrals due to the soft cap).<sup>198</sup> Any amount in excess of this rate cap will be recovered in the twelve month period immediately following the standard 12-month recovery period. It should be noted

<sup>196</sup> Exhibit 505, page 29.

<sup>197</sup> *Id.* at page 24.

<sup>198</sup> *Id.* at page 25.

that the cap is in fact “soft” and can be exceeded when the deferred amounts are collect in the ensuing 12 month periods. In this way there is no lack of clarity in the recovery of deferred amounts that were prudently incurred. Rather, any amounts deferred from a previous period will definitely be recovered over the subsequent twelve-month period, even if they exceed the soft cap, subject to the required annual prudence review.

The soft cap has an additional feature of allowing for an up-front prudence review of any fuel cost increases associated with rate changes in excess of the soft cap.<sup>199</sup>

By definition, the rate cap will come into effect only when there are significant increases in the cost of fuel, purchase power and off-system sales margins. In these circumstances, I believe it is likely that the parties and perhaps the Commission itself would wish to have an investigation before the full amount of the increase is passed through to consumers. By limiting the initial amount of any increase to 1.5 percent [for each six month accumulation period], there would be a twelve-month delay during which a prudence review or any other review could be conducted by the Commission. Thus, besides just limiting the extent of any increase at any point in time, there is a beneficial effect of better ensuring that the costs recovered ultimately will only be those of which had been prudently incurred by Aquila.<sup>200</sup>

4. What line losses adjustment should be included in determining the fuel cost adjustment?

4 CSR 240-20.090(9) explicitly provides that any fuel adjustment mechanism must taken into account line losses that occur from the delivery of electricity to customers at different voltage levels. The need for such a requirement is apparent.

Losses increase as more and more facilities are used to supply customer needs. For example, losses are lowest at the transmission voltage level, higher at the primary [distribution] level, and still higher at the secondary [distribution] voltage level. This occurs because more lines and more

---

<sup>199</sup> It is important to note that the implementation of the soft cap will not alleviate any legal concerns with the Aquila adjustment mechanism allowing for the possibility of flow-through for imprudent fuel and purchased power costs. Rather, the soft cap would merely “buy time” for the Commission to determine prudence of any excessive increases. Imprudent fuel costs that are below the soft cap would still flow through the adjustment mechanism in direct contravention of Section 386.266 and the Commission’s rules.

<sup>200</sup> Exhibit 505, page 25.

transformers are needed to deliver power to the lower voltage customers.<sup>201</sup>

Despite the explicit requirements of this Commission rule, Aquila's proposed mechanism fails to account for such differences between customers, but instead assumes that the same loss factor is applicable to the delivery of electricity to all customers.

Aquila assumed that every class had the same line losses. This results from the fact that it has a single base (equal to the proposed included cost of fuel and variable purchased power divided by kilowatthour sales) and a single adjustment factor equal to the adjustment period cost per kWh sold minus the base cost. As a result of dividing costs by kWh sales, it is implicit that everybody is charged the system average loss factor.<sup>202</sup>

In order to correct Aquila's failure to properly account for line losses or to comply with the Commission's regulation, SIEUA / AGP proposed loss factors.<sup>203</sup> These loss factors and the procedure for their application is contained in Exhibit 510.

5. What heat rate testing of generating plants should be conducted?

4 CSR 240-3.161(2)(P) provides that the electric utility shall file "a proposed schedule and testing plan with written procedures for heat rate tests . . . to determine the base level of efficiency for each of the units." This heat rate testing is necessary to develop a baseline line of efficiency to ensure that the utility continues to operate at such a level. "[H]eat content, thermal, generating and delivery efficiency and other technical factors should be carefully considered in advance of any adjustment of electric rates for

---

<sup>201</sup> Exhibit 501, pages 3-4.

<sup>202</sup> *Id.* at page 3.

<sup>203</sup> It should be understood that SIEUA / AGP's testimony on the application of loss factors does not remedy Aquila's violation of the Commission's rule. 4 CSR 240-20.090(9) provides that the utility shall conduct a Missouri jurisdictional system loss study "within twenty-four (24) months prior to the general rate proceeding in which it requests its initial RAM." The loss factors provided by SIEUA / AGP are the results of Aquila's latest study conducted in 2002. (See, Tr. 623). This dated line loss study clearly does not comply with the dictates of the Commission rule and Aquila therefore is barred from implementing a fuel adjustment mechanism.

increased fuel expense.”<sup>204</sup> As Staff indicates, this additional testing and filing requirement is necessary because the same incentives that exist under traditional ratemaking, to control fuel and purchased power costs, to not exist under an adjustment mechanism.<sup>205</sup>

Aquila’s proposed adjustment mechanism fails to provide “written procedures” for heat rate tests. In order to correct Aquila’s oversight, Staff has proposed to correct Aquila’s deficiencies going forward.<sup>206</sup> Staff suggests that such written procedures should:

(1) require testing of generation plant heat rates on a regular basis; (2) generally conform to industry-standard performance testing methodologies; (3) require identification of plant systems, structures of components that are degrading overall plant heat rate / efficiency; and (4) require cost-effective maintenance or replacement activities on any such system, structures, or components that have been identified as degrading overall plant heat rate / efficiency.<sup>207</sup>

Ultimately, Staff recommends testing procedures similar to those set forth in the American Society of Mechanical Engineers’ Performance Test Codes.<sup>208</sup>

## 6. Length of Fuel Adjustment Clause

In its proposal Aquila suggests that a fuel adjustment mechanism be implemented for a period of four years, the maximum period allowed under Commission rules. Several factors mitigate against such a lengthy mechanism. First, as the Commission is aware, if implemented, this will be the fuel adjustment clause in Missouri in

---

<sup>204</sup> 13 Vanderbilt Law Review 663, 674 (citing to *Pennsylvania Public Utilities Commission v. Metropolitan Edison Co.*, 13 P.U.R. 3d 29).

<sup>205</sup> Exhibit 227, page 5.

<sup>206</sup> Again, Staff’s testimony on the appropriate method to conduct heat rate testing does not alleviate Aquila’s failure to comply with the Commission’s regulations. Aquila’s proposed adjustment mechanism does not comply with the Commission’s rule and Aquila is therefore barred from implementing a fuel adjustment mechanism.

<sup>207</sup> Exhibit 227, page 4.

<sup>208</sup> *Id.* at page 5.

approximately 28 years. As such, issues will inevitably arise as to the administration, auditing and billing of the fuel adjustment clause. Rather than subject the Commission to continuous litigation designed to resolve such issues, several parties suggest that the Commission provide for a shorter period and thus, have the opportunity to address the overall structure of the adjustment mechanism at an earlier time. Second, prior to the end of the four year period, Aquila anticipates the in-service date of the Iatan 2 low-cost generating facility. The availability of this unit will inevitably change the Aquila's generating portfolio and the costs and dynamics of Aquila's energy generation. Any fuel adjustment mechanism should be updated to account for this new generation asset. Finally, Aquila has recently announced that it would be acquired by Great Plains Energy. Questions regarding the structure of the combined utility and the nature in which the generating assets of that combined utility will be dispatched will arise over the next two years. The fuel adjustment mechanism arising out of this proceeding should reasonably contemplate such issues and provide an opportunity for any changes to be implemented.

Given all these issues, SIEUA / AGP suggest that the Commission limit any fuel adjustment mechanism to a period of two years.<sup>209</sup>

#### 7. Incentive by Design / Skin in the Game

On this point the position of Aquila has been nothing less than greedy and disingenuous. Aquila witnesses steadfastly testify that incentives will not motivate them. Maybe they do not. But surely there is someone of authority left at Aquila that will understand the need to perform in order to make a profit. The embarrassing lack of motivation in its witnesses cannot possibly be construed to provide a justification for the automatic fuel clause treatment of 100% of fuel and purchased power costs. Rather this

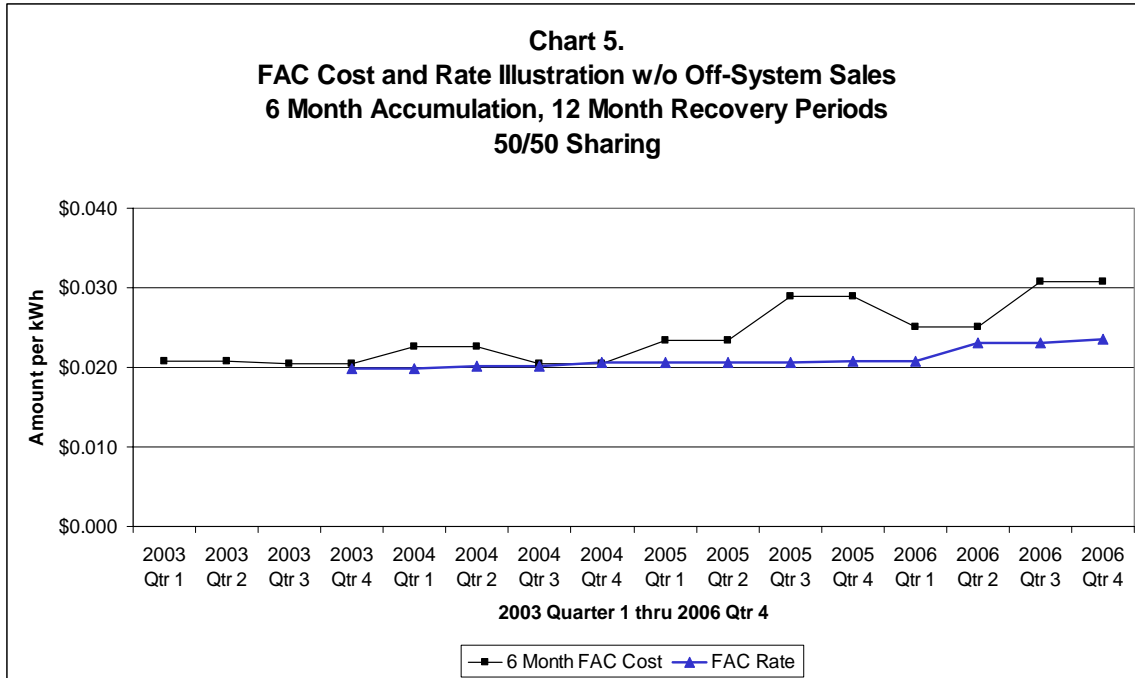
---

<sup>209</sup> Exhibit 505, Schedule 1, page 1; Exhibit 207, page 3; Exhibit 208, page 18.

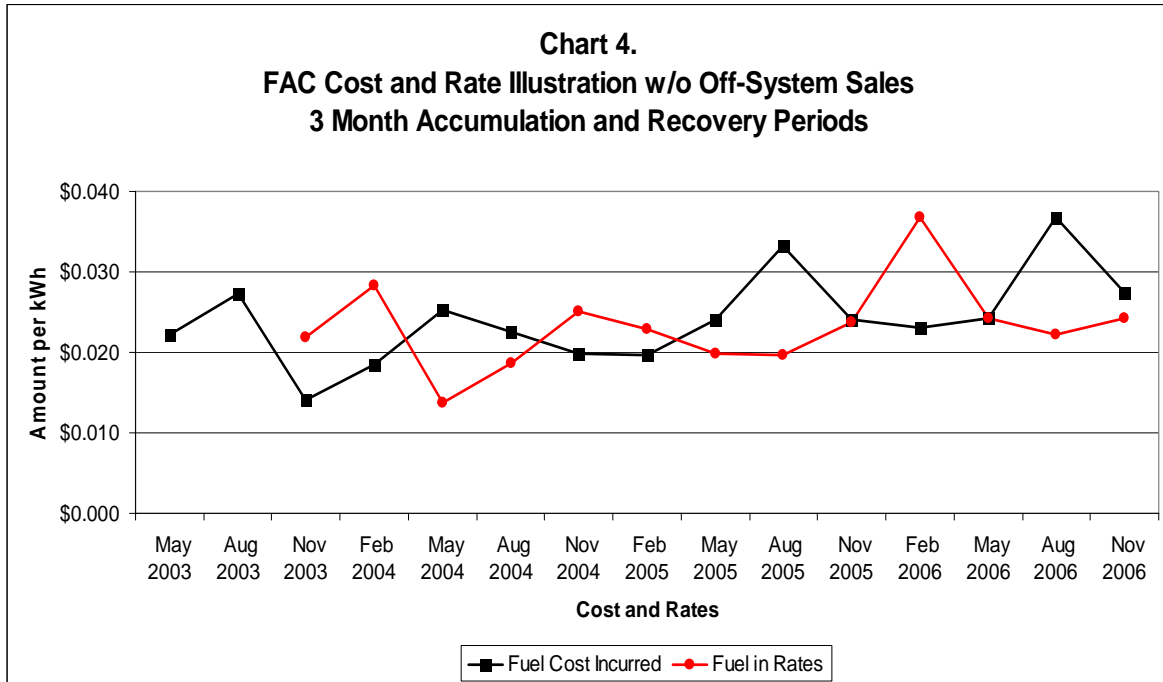
company, like its customers, ought to understand that better performance leads to better earnings. Call it alignment of interests. Call it skin in the game. Call it equitable sharing. Call it mitigation of rate volatility. Call it consumer protection. As compared to the one-sided approach proposal by Aquila, the alternative FAC meets any need for a FAC in a manner that answers all of these calls. It will also address the financial needs that Aquila asserts are important, but it will do so with a FAC that balances financial interests of Aquila and those of the ratepayer. Make no mistake, it is the ratepayer that will be paying the costs in the final analysis so any of the alleged benefits ought to come out of proposal that at least mitigates the ratepayer concerns as fully delineated and developed in this record. The record is devoid of credible support for the 100% automatic rate changes for all fuel and purchased power costs. Based on this record the only choices available to the Commission are no FAC, or the alternative FAC illustrated in Chart 5 and fully set forth in Johnstone's rebuttal.<sup>210</sup>

---

<sup>210</sup> Exhibit 505, Schedule 1.



Compare Chart 5 to the Aquila proposal as illustrated below and the choice to provide more stable rates is obvious. While Aquila, since the time when this chart was prepared, has agreed to modify its proposal to extend the recovery periods to 12 months, that one change cannot fix all of the inherent problems. If there is to be a FAC, the alternative FAC that has received the carefully qualified support of many parties, is the only credible choice supported by this record.



**G. IEC: If the Commission authorizes Aquila to use an interim energy charge, how should it be structured?**

**1. What natural gas costs / prices should be included in the charge?**

SIEUA / AGP assert that any interim energy charge should reflect realistic gas, coal and purchased power prices. In this regard, realistic prices should be indicative of prices experienced in the recent past and reasonably likely to be experienced in the near future. Utilization of prices higher than those reasonably likely to be experienced will only serve to eliminate the incentives necessary for the utility to procure fuel in a prudent and cost efficient manner.

**2. What coal costs / prices should be included in the charge?**

SIEUA / AGP assert that any interim energy charge should reflect realistic gas, coal and purchased power prices. In this regard, realistic prices should be indicative of prices experienced in the recent past and reasonably likely to be experienced in the near future. Utilization of prices higher than those reasonably likely to be experienced will

only serve to eliminate the incentives necessary for the utility to procure fuel in a prudent and cost efficient manner.

3. What purchased power costs / prices should be included in the charge?

SIEUA / AGP assert that any interim energy charge should reflect realistic gas, coal and purchased power prices. In this regard, realistic prices should be indicative of prices experienced in the recent past and likely to be reasonably experienced in the near future. Utilization of prices higher than those reasonably likely to be experienced will only serve to eliminate the incentives necessary for the utility to procure fuel in a prudent and cost efficient manner.

4. Should the IEC be established and trued-up on a divisional basis (for MPS and for L&P separately) or on a unified basis (MPS and L&P combined)?

The costs of generation, fuel use and need for purchased power to provide for load differ markedly between Aquila's divisions. Moreover, differences in operating characteristics even suggest that off-system sales potentials differ between the two service territories. It would be discriminatory and unjustified for customers in the MPS service territory to be burdened with costs incurred to provide service to St. Joseph and likewise for St. Joseph customers to shoulder costs incurred in providing service to MPS. These cost and operational differences will remain without regard to the structure of an IEC mechanism.

The only IEC mechanism that was ever implemented for Aquila recognized these cost differentials and any future mechanism should continue to do so. Although we offer no prediction regarding the pending acquisition by Great Plains Energy of Aquila's assets, certainly continued separate operation and cost-tracking, until a convincing

showing has been made that those differences no longer exist, protects the ratepayers in both service territories, prevents “gaming,” and preserves information for possible audit.

5. Additional items to consider include treatment of off-system sales and hedging program costs / benefits?

SIEUA / AGP take no position on this issue.

### **CONCLUSION**

For all the foregoing reasons, as well as that contained in its prefiled testimony, SIEUA / AGP respectfully request that the Commission issue its Report and Order consistent with its positions.

Respectfully submitted,



Stuart W. Conrad, MBE #23966  
David L. Woodsmall, MBE #40747  
3100 Broadway, Suite 1209  
Kansas City, Missouri 64111  
(816) 753-1122 Ext. 211  
Facsimile: (816) 756-0373  
Internet: [stucon@fcplaw.com](mailto:stucon@fcplaw.com)

ATTORNEYS FOR SEDALIA  
INDUSTRIAL ENERGY USERS  
ASSOCIATION AND AG PROCESSING,  
INC.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that I have this day served the foregoing pleading by email, facsimile or First Class United States Mail to all parties by their attorneys of record as provided by the Secretary of the Commission.

A handwritten signature in black ink, appearing to read "David L. Woodsmall", is positioned above a horizontal line. A vertical red line is located to the right of the signature.

David L. Woodsmall

Dated: April 27, 2007