

**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. )	

**PREHEARING BRIEF**

**OF**

**SEDALIA INDUSTRIAL ENERGY  
USERS ASSOCIATION**

**AND**

**AG PROCESSING, INC.**

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AG PROCESSING, INC.

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## **Rate of Return**

### **1. Return on Common Equity:**

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

Position: Consistent with the dictates of the *Hope* and *Bluefield* decisions, the Commission should adopt a proxy group that reasonably represents the financial and operating risks of Aquila's regulated utility operations without consideration of its non-regulated investments. Recognizing that Aquila's utility investments would likely have a bond rating of BBB, a business profile score of 6, and a common equity ratio of 47.5%, the Commission should select 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. In addition, the Commission should not include any company which has recently been exposed to corporate or market restructuring. Finally, in order to assure that reliable data is available for the analyst to conduct a reliable return on equity estimation, the Commission should only include companies that: (1) have consensus analyst growth rates estimates available from Zacks, Reuters and Thomson Financial; (2) have not engaged in significant merger and acquisition activities; and (3) have not suspended dividends over the last two years. (Gorman Direct, pages 18-20; Parcell Surrebuttal, pages 6-7).

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

Position: The Commission should consider the results of the discounted cash flow model (DCF); risk premium model; and capital asset pricing model (CAPM) in determining the appropriate return on equity for Aquila. Utilization of each of these models, together with reasonable inputs, will lead to the following return on equity figures: (1) DCF = 9.4%; (2) risk premium = 9.8% to 10.2%; and (3) CAPM = 10.2% to 10.6%. Therefore, a reasonable return on equity is 10.0%. (Gorman Direct, pages 18, 20-38; Parcell Direct, pages 6-7).

#### **C. 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?**

Position: So long as the Commission utilizes reasonable input assumptions, both the constant growth and multistage DCF models will result in a reasonable estimation of Aquila's return on equity. (Gorman Direct, pages 20-26; Gorman Surrebuttal, pages 2-4; Parcell Rebuttal, pages 4-6).

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

Position: The appropriate DCF growth rate should not be based on the subjective, self-serving assumptions of any specific analyst, but instead are those growth rates that are provided by a consensus of objective, independent security analysts. Services such as Zack's Detailed Analyst Estimates, Reuters First Call and Thomson Financial provide a consensus growth rate projection based on a survey of objective, independent security analysts. Utilization of such objective, consensus growth rate projections in the DCF model will lead to a reasonable return on equity (9.4% to 9.5%) for Aquila. (Gorman Direct, pages 22-23; Gorman Rebuttal, pages 8-10; Gorman Surrebuttal, pages 2-6; Parcell Direct, pages 22-23; Parcell Rebuttal, pages 6-11; Parcell Surrebuttal, pages 4-5 and 7).

**E. 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?**

Position: 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. This premium to account for the difference in risk between equity and debt is properly measured by the difference in returns between national average commission authorized returns for electric companies and both Treasury bonds and A-rated utility bond yields.

The equity risk premium will vary based on changes to the market perceived risk of equity investments relative to bond investments. The appropriate equity risk premium in this case should recognize the current relative risk of equity versus debt investments. The current risk of utility investments can be estimated from the relative spread in yield between utility corporate bonds and treasury bonds.

The current utility bond yield spreads are at the lowest in the past 26 years. This indicates that utility investment risk is low by historical estimates. Therefore, the equity risk premium in this case should be no higher than the average equity risk premium that existed over the last 20 years. The equity risk premium does not change simply as a result of changes to nominal interest rates as suggested by Company witness Hadaway. Rather, equity risk premiums change as a result of changes to relative risk, of which interest rates can be a factor, but not the only factor. Based on a twenty year analysis of risk premiums, and an examination of utility investment risk, the current equity risk premium is 5.2% over Treasury bond yields and 3.7% over A-rated utility bond yields. (Gorman Direct, pages 6-8, 26-28; Gorman Rebuttal, pages 3-4, 10-11; Gorman Surrebuttal, pages 6-12; Parcell Rebuttal, pages 11-15).

**F. 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?**

Position: The Commission should utilize the bond yield and attendance risk premium for both Treasury bonds and A-rated utility bonds. The use of these bond yields in conjunction with the attendant risk premiums will lead to a reasonable return on equity (9.8% to 10.2%) for Aquila. The Commission should consider both current observable and projected interest rates to estimate the utility's cost of equity. The Commission should not rely only on forecasted interest rates because interest rate forecast reliability is at very best problematic. (Gorman Direct, pages 6-8, 28-29; Gorman Rebuttal, pages 12-13; Parcell Rebuttal, pages 11-15).

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

Position: So long as the Commission utilizes an appropriate proxy group consisting of companies with business and financial risks similar to that of Aquila it is unnecessary to provide an equity add-on. In this case, the use of similar equity ratios, business profile scores and bond ratings will lead to a proxy group of companies that reflect diverse types of operational risks including high construction budgets, lack of weather diversity, lack of regulatory diversity and small size. With all these financial and operational risks reflected in the proxy company group it is inappropriate to attempt to increase the return on equity to compensate for perceived higher risk (i.e., construction budget or small size) without simultaneously reducing the return on equity to account for those items of lower risk (i.e., weather diversity and regulatory diversity). (Gorman Direct, pages 3-6; Gorman Rebuttal, pages 4-6).

**2. Capital Structure: What capital structure should be used for determining Aquila's rate of return?**

Position: The Commission should utilize Aquila's actual consolidated capital structure for determination of rates. Through its efforts to restructure its financial position through the sale of utility properties, Aquila has been able to significantly reduce its debt obligations. The appropriate capital structure for use in this proceeding consists of: (1) 47.5% equity and (2) 52.5% long term debt. (Gorman Direct, pages 8-11; Parcell Direct, pages 16-19).

**3. Cost of Debt: What cost of debt should be used for determining Aquila's rate of return?**

Position: Aquila's cost of debt should be reduced to reflect those debt instruments that have been recently retired. Repricing these securities reflecting today's lower market interest rates is consistent with the Company's commitment to protect customers from the

costs associated with Aquila's restructuring. Repricing these instruments leads to an MPS embedded debt cost of 6.56%. (Gorman Direct, pages 11-17; Gorman Surrebuttal, pages 15-18).

#### **Rate Base Issues**

4. **Generation Resources:** What are the prudent types and amounts of generation resources to include in Aquila Networks – MPS's rate base and for determining the fuel and purchased power expense of Aquila Networks – MPS and Aquila Networks – L&P?

Position: SIEUA / AGP take no position on this issue.

5. **South Harper:** What costs related to the South Harper facility, if any, should be included in Aquila Networks – MPS's rate base?

Position: SIEUA / AGP take no position on this issue.

6. **Accounting Authority Orders:** 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?

Position: SIEUA / AGP take no position on this issue.

#### **Expense Issues**

7. **Allocation of fuel and purchased power between Aquila Networks – MPS and Aquila Networks – L&P:** On what basis should Aquila's fuel and purchased power expense be allocated between Aquila Networks – MPS and Aquila Networks – L&P?

Position: Fuel and purchased power prices should be allocated based upon the historical practice of using the relative proportions of stand-alone dispatch models for both the MPS and L&P operating divisions. Based upon these stand-alone dispatch studies, fuel and purchased power should be allocated 19.0% to L&P and 81.0% to MPS. (Brubaker Direct, pages 13-16; Brubaker Supplemental Direct, pages 9-10).

8. **Fuel and Purchased Power Expense:** What amount of fuel and purchased power costs should be included in expenses?

**Position:** Fuel and purchased power expense should reflect the adjustments proposed by SIEUA / AGP for natural gas prices, coal prices, fuel allocation, and hedging costs. Accounting for these adjustments, Aquila should be allowed total company fuel and purchased power (demand and energy) costs of \$203.5M (\$160.6M for MPS and \$42.9M for L&P). (Brubaker Direct and Supplemental Direct).

9. **Coal Prices:** On what prices should Aquila's coal fuel expense be based in setting rates?

A. Should they be based on Aquila's contract with Consolidated Coal Company or on Aquila's contract with C.W. Mining?

**Position:** The Commission should set Aquila's coal fuel price based upon the option price contained in the C.W. Mining contract. (Brubaker Direct, pages 8-10; Brubaker Supplemental Direct, page 4).

10. **Natural Gas Prices:** On what prices should Aquila's natural gas expense be based in setting rates?

**Position:** It is inappropriate for the Commission to utilize futures gas prices for ratemaking. It has been established that, because of the fear factor resulting from Hurricanes Rita and Katrina, futures natural gas prices have been much higher than actual gas prices. That is to say, the future gas price for any particular month is significantly higher than the actual gas price when that month arrives. Given the unreliability of futures gas prices, the Commission should utilize actual gas prices from the most recent 12-month period. (Brubaker Direct, pages 10-12; Brubaker Supplemental Direct, pages 4-6).

11. **Off-system Sales Margins:** How should off-system sales margins be determined? What amount of off-system sales margins should be included in expenses?

**Position:** SIEUA / AGP take no position on this issue.

12. **Depreciation:** What depreciation rates should be used for determining Aquila's depreciation expense?

A. What average service life should be used for determining depreciation rates for Other Production Accounts (Accounts 342 to 346)?

**Position:** The average service lives contained in current depreciation rates for Other Production Accounts reflect turbine lifespans that are unreasonably short. As a result, depreciation rates for these accounts are excessive and will inevitably result in intergenerational inequity. The Commission should modify the average service life for these accounts to reflect a 35 year life. While this 35 year service life is still shorter than that approved for turbines for other Missouri electric utilities, it will better match utility costs with the ratepayers benefiting from those costs. (Gorman Direct, pages 38-43; Gorman Surrebuttal, page 18).

### **Demand Side Management**

13. Should the Demand Side Management programs Aquila proposes be approved? If so, who should bear the costs of the programs?

**Position:** SIEUA / AGP take no position on this issue.

### **Hedging**

14. Should the Commission allow rate recovery of the results of Aquila's hedging program?

**Position:** Data provided by Aquila reveals that Aquila has not acted consistent with its hedging program. Instead, Aquila has significantly overhedged its natural gas needs through fixed price swap arrangements and call option contracts. The Commission should disallow that portion of hedging costs associated with Aquila's excessive hedging practice. (Brubaker Supplemental Direct, pages 6-8).

### **Fuel Cost Recovery**

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

**Position:** No. The Commission should continue to reflect all fuel and purchased power costs in base rates.

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

Position: The Commission should require a utility to show an “acute need” prior to deviating from base rate treatment for fuel and purchased power costs. Reflecting fuel and purchased power costs in base rates provides powerful incentives for the utility to engage in cost minimizing practices. These incentives and resulting conduct has resulted in Missouri electric rates that have been historically lower than the national average. Use of the acute need standard will ensure that the advantages of the traditional file and suspend approach to rates are not diminished without sufficient cause. (Johnstone Rebuttal, pages 5-6 and 9-11).

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

Position: The Commission should reflect all fuel and purchased power costs in base rates. In the event that the Commission authorizes a fuel and purchased power adjustment mechanism, it should attempt to implement the positive incentives of base rate treatment in any fuel adjustment clause. By making 50% of fuel costs subject to change in the fuel adjustment clause, 50% will continue to receive the same treatment afforded all other costs under the traditional file and suspend approach to rate changes. The Commission thereby takes steps to ensure that the utility has cause to continue to engage in cost minimization conduct while also of course continuing to make prudent decisions. (Johnstone Rebuttal, pages 12-16).

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

Position: No. 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. Several factors point to the elimination of demand costs from any fuel adjustment mechanism. First, demand costs have not demonstrated the volatility indicative of recent fuel prices. Second, given their lack of volatility, demand costs can adequately be addressed in base rates. 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.



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

Position: Yes. As mentioned, SB179 was designed to address volatility in fuel and purchased power. Broadbrush inclusion of fuel and purchased power costs would unnecessarily and inappropriately provide the utility with customer funded insurance against catastrophic failures at generating facilities. For instance, a broadbrush fuel adjustment clause would have allowed the utility to recover replacement power costs associated with the explosion at Lake Road. (Other examples in the State would include the replacement power costs due to the failure at Taum Sauk and the explosion at Hawthorne). To avoid this situation, the FAC must provide for a threshold level of the normally available low cost generation to form a computation basis for the FAC. This threshold level of low cost generation is designed to accommodate a reasonable level of both forced outages and scheduled maintenance outages. (Johnstone Rebuttal, pages 16-21).

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

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

Position: In order to minimize the volatility experienced by ratepayers of any fuel adjustments, the Commission should utilize a 12 month recovery period of any over / under collection of fuel and purchased power costs. (Johnstone Rebuttal, pages 22-24).

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

Position: Commission Rule 4 CSR 240-20.090(9) mandates that the “design of the RAM rates shall 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 account for these line losses, customers served at the primary voltage level should be charged at a multiplier of 0.9883 with customers served at the secondary voltage level charged at 1.0063. (Brubaker Rate Design Direct, pages 3-5).

**iii. How often should the fuel adjustment clause be adjusted?**

Position: In order to minimize the volatility experienced by ratepayers of any fuel adjustments, the Commission should limit changes in the fuel adjustment clause to 6 month periods. Furthermore, these six month accumulation periods should coincide with the seasonal changes. (Johnstone Rebuttal, pages 6-7 and 22-24).

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

Position: In order to protect customers from excessive volatility in rates resulting from a fuel adjustment clause, the Commission should implement a soft rate cap. The cap will limit increases to a maximum of 3.0% on an annual basis; provided however, that the calculation would exclude amounts deferred from previous periods due to operation of the cap. (Johnstone Rebuttal, pages 24-25).

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

Position: The Commission should require heat rate testing of generating plants.

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

- i. What natural gas costs / prices should be included in the charge?

Position: 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.

- ii. What coal costs / prices should be included in the charge?

Position: 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.

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

Position: 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.

- iv. 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)?

Position: SIEUA / AGP reserve the right to assert a position on this issue at the hearing.

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

Position: SIEUA / AGP reserve the right to assert a position on this issue at the hearing.

Respectfully submitted,



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ATTORNEYS FOR SEDALIA  
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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 written over a horizontal line. The signature is cursive and stylized.

David L. Woodsmall

Dated: March 29, 2007