

# **SCHEDULE WEB-8**

Exhibit No.:  
Issues: Quarterly Cost Adjust.  
Witness: Donald Johnstone  
Type of Exhibit: Direct Testimony  
Sponsoring Party: AGP  
Case Number: HR-2009-0092  
Date Testimony Prepared: February 27, 2009

Aquila, Inc. / dba  
Kansas City Power & Light Company  
Greater Missouri Operations

Case No. HR 2009-0092

Prepared Direct Testimony of

**Donald Johnstone**

On behalf of

AG PROCESSING INC, A COOPERATIVE

February 2009



Before the  
Missouri Public Service Commission

Aquila, Inc. / dba  
Kansas City Power & Light Company  
Greater Missouri Operations

Case No. HR 2009-0092

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Competitive Energy  
DYNAMICS

Before the  
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### **Prepared Direct Testimony of Donald Johnstone**

1    Q    PLEASE STATE YOUR NAME AND ADDRESS.

2    A    My name is Donald Johnstone and my address is 384 Black Hawk Drive, Lake Ozark,  
3        Missouri, 65049. I am employed by Competitive Energy Dynamics, L. L. C.

4    Q    ON WHOSE BEHALF ARE YOU APPEARING?

5    A    I am appearing on behalf of intervenor AG PROCESSING INC, A COOPERATIVE (AGP). I  
6        have also been retained by Triumph and Omnium, each of whom is a steam customer  
7        of the applicant utility.

8    Q    PLEASE STATE YOUR QUALIFICATIONS AND EXPERIENCE.

9    A    I have been working in the utility business since 1973. I started as an engineer for the  
10        Union Electric Company, where I had assignments in power operations and corporate  
11        planning. Since 1981 I have worked as a consultant in the field of utility regulation.  
12        My work has taken me to many states and I have addressed various matters including  
13        rate design, the cost of service, fuel costs, forecasting, resource planning, and

Competitive Energy  
DYNAMICS

1 industry restructuring. My experience has included electric, gas, water, sewer, and  
2 steam utility services. A more complete description is set forth in Appendix A.

3 **SUMMARY**

4 Q WHAT ARE THE SUBJECTS ADDRESSED IN YOUR TESTIMONY?

5 A I address the Quarterly Cost Adjustment mechanism. I oppose the QCA as modified by  
6 Aquila dba KCPL/GMO ("Aquila" or "Company") and recommend elimination of the  
7 QCA if Aquila's proposal were to be the form.

8 In the alternative I recommend the continuation of the current QCA with an  
9 adjustment to reflect the current base cost of fuel and an adjustment to the coal  
10 performance standard to reflect reasonable operational experience and capability.

11 **QCA HISTORY**

12 Q DID AGP SUPPORT THE ADOPTION OF THE RATE MECHANISM THAT IS KNOWN AS THE  
13 "QUARTERLY COST ADJUSTMENT" OR "QCA"?

14 A Yes. The QCA is the product of a stipulation and agreement to which AGP and Aquila  
15 were parties. AGP was then, and remains now, the largest of the customers on the  
16 steam system. (Triumph and Omnium are also large steam customers with an interest  
17 in this matter.) While I am not an attorney and do not offer a legal interpretation of  
18 the agreement, I will speak to my understanding of that agreement and the value of  
19 the present QCA.

1 Q PLEASE SUMMARIZE THE OPERATION OF THE QCA.

2 A The QCA tracks changes in the cost of the coal, natural gas and oil fuels that are used  
3 to produce steam. Like the Aquila and UE electric fuel riders, it collects cost  
4 variations over a period of several months and then recovers the accumulated  
5 variations in overlapping 12-month periods. This approach mitigates the volatility in  
6 retail rates and avoids sharp and extraordinary increases or decreases in rates.

7 An important goal from the perspective of AGP was to provide substantial, but  
8 not complete, cost tracking with respect to the price of fuels. The goal of the  
9 substantial tracking was to provide more durable earnings for Aquila and to extend the  
10 time between rate cases for the benefit of both Aquila and its steam customers. On  
11 the other hand, the goal of less than complete tracking of the fuel cost was to provide  
12 for mechanisms that would maintain an alignment of the financial interests of Aquila  
13 and the financial interests of its customers in a low cost for fuel.

14 The QCA includes some innovative techniques that were the product of the give  
15 and take that resulted in the stipulation. The first innovative mechanism is the  
16 provision that tracks 80% of fuel cost changes through the QCA while leaving the  
17 remainder for traditional base rate regulation. At the time, the several Missouri  
18 electric FAC's that employ a similar approach did not exist. Thus, this was the first  
19 such sharing mechanism in the State. The second innovative aspect of the QCA  
20 established a performance threshold for the coal-fired boiler that produces most of  
21 the steam. An important consideration is that Aquila makes decisions on a regular  
22 basis that affect the availability of the boiler. The impact of those operating and  
23 maintenance decisions properly belongs to Aquila.

1           From another perspective, there can be no contention that the price of fuels  
2           impacts Aquila's ability to operate and maintain its boiler. Yet operating and  
3           maintenance matters have a large and direct impact on the total cost of fuel. That is  
4           because natural gas is a much more expensive fuel that is used when coal-fired steam  
5           is limited. Thus, in this regard an important goal of AGP was to ensure Aquila  
6           remained financially accountable for the operating performance of the coal-fired  
7           boiler in the event that it did not meet reasonable expectations.

8    **Q    HOW WAS THE PERFORMANCE THRESHOLD FOR THE COAL-FIRED BOILER**  
9           **DETERMINED?**

10   **A**It was set by an agreement contained in the stipulation. In evaluating the  
11           acceptability of the agreed performance threshold, I considered two factors. First was  
12           the level of the coal-fired steam production that was being used to develop and  
13           support the revenue requirements in the Staff's production cost model. The second  
14           was the company's forecast of future usage. The intent was to provide a threshold  
15           that would generally allow costs to pass through, thereby allowing costs to be tracked  
16           without adjustment due to the performance threshold. The concept was intended to  
17           protect customers from the costs occasioned by any significant unexpected shortfall in  
18           the performance of the coal boiler. This performance threshold, like all other aspects  
19           of the QCA, was agreed to and supported by Aquila as well as AGP.

20   **Q    DID THE COAL PERFORMANCE STANDARD WORK AS DESIGNED?**

21   **A**Yes and no. I think it is fair to say that both AGP and Aquila were surprised by the  
22           extent to which cost adjustments occurred pursuant to this provision. That is both

1 good news and bad. The bad news is that the performance of the coal-fired boiler was  
2 below the performance threshold and, all other things held equal that had an adverse  
3 impact on Aquila's earnings. The good news is that customers were protected from  
4 the consequence of performance below the threshold.

5 Q DOES THE QCA MAKE IT IMPOSSIBLE FOR CUSTOMERS TO KNOW WHAT THEIR RATES  
6 WILL BE AFTER THE RATE CASE?

7 A Unfortunately, the QCA changes rates every quarter and this rate case will be only one  
8 aspect of the change in costs. The total rate increase for the next year remains  
9 unknown. It also complicates the comparison of present and proposed rates.

10 Q IS THERE REASON FOR CONCERN WITH AQUILA'S PAST FUEL PURCHASE PRACTICES?

11 A Yes. Prior to approval of the QCA the fuel related operations of the steam system and  
12 the electric system were integrated. It came as a surprise when it was learned that  
13 Aquila had developed a gas hedging program for the steam operation that was  
14 separate from the electric operation. Another surprise was that the hedging approach  
15 was simply patterned after one Aquila had used for its gas LDC business. Finally,  
16 Aquila's hedging of its natural gas supplies was based on a simple approach intended  
17 to stabilize costs. Even that aspect did not perform well because Aquila failed to  
18 consider that gas in the steam context was a swing fuel that was used only to the  
19 extent necessary after operation of the coal-fired boiler (the base load supply). This  
20 was a particular problem because forecast load growth did not materialize.



1   **Q     WHAT ACTIONS WERE TAKEN TO ADDRESS THE CONCERNS WITH THE**  
2       **HEDGING PROGRAM?**

3   A     Aquila ceased operation of the program.  However, the costs incurred before the  
4       program ceased operation, some of which were extraordinary, were passed through to  
5       customers pursuant to the QCA.

6   **QCA RECOMMENDATIONS**

7   Q     IF THERE CONTINUES TO BE A QCA, IS THE INITIAL EXPERIENCE WITH THE COAL  
8       PERFORMANCE STANDARD REASON TO ELIMINATE THE PROVISION?

9   A     No.  The logic for it continues to be sound.  Due to the vast difference in the cost of  
10      steam from coal versus natural gas it is important to maintain a focus on high  
11      performance for the coal-fired steam production.

12           As a practical matter there is only one coal-fired boiler that produces steam  
13      and as a consequence any loss of production from that boiler creates a large operating  
14      cost penalty.  Absent a performance threshold, the FAC would function as replacement  
15      cost insurance for the steam produced by that unit.  That insurance function is  
16      something quite different from an adjustment intended to accommodate changes in  
17      the price of fuels.  Therefore, another function of the coal performance threshold is to  
18      limit the operation of the QCA to the matter it is intended to resolve - changes in the  
19      prices of fuels.

1 Q IF THERE CONTINUES TO BE A QCA SHOULD THE 80/20 TRACKING APPROACH  
2 CONTINUE?

3 A Yes. There are several reasons why this should continue. First, the 80% factor  
4 provides very substantial protection for Aquila's cost of fuels. No doubt in part due to  
5 the QCA, Aquila did not apply for a steam rate increase along with its last prior  
6 application for an electric rate increase. The current steam rates have been effective  
7 since March 6, 2006, so by the time new rates take effect in this case it will have been  
8 more than three years. Of course, under the recently enacted Missouri electric FAC  
9 legislation a rate case is required every four years. In comparison, Aquila has almost  
10 gone that long.

11 Q HAVE THE ANNUAL AUDITS OF THE QCA COSTS BEEN RESOLVED?

12 A No.

13 Q ARE YOU AWARE OF ANY BENEFITS THAT HAVE ACCRUED TO AQUILA DUE TO THE  
14 QCA?

15 A Yes. Substantial changes in cost have been passed on to customers, thereby shielding  
16 Aquila from a large measure of the impact of the cost increases while customers have  
17 been on the receiving end of the costs.

18 Q HAVE ANY CONCERNS BEEN RAISED BY AQUILA?

19 A Yes. Aquila has stated that both the coal performance threshold and the 80/20  
20 mechanism have resulted in less than 100% pass through of the costs. 100% pass  
21 through is the apparently the current goal of Aquila according to the testimony of Mr.  
22 Rush.

1 Q HAVE ANY CONCERNS BEEN RAISED BY AGP?

2 A Yes. One important concern was Aquila's design and implementation of a hedging  
3 program for natural gas. A particular problem was that too much gas was hedged  
4 relative to system needs. That occurred in large part because forecast increases in  
5 steam sales did not materialize as planned. Another concern was the overall approach  
6 to the design of the hedging program and its implementation. Generally speaking,  
7 hedging, if used, must be designed to fit the nature of the loads and ought to be  
8 integral to a purchasing approach designed to minimize the cost of gas purchased over  
9 time.

10 Q HAS AGP PURSUED A PRUDENCE ADJUSTMENT IN THE QCA PROCEEDINGS?

11 A No. A part of the consideration has been the fact that cost tracking was already less  
12 than 100% due to the 80/20 and due to the coal performance standard. There is some  
13 sense of rough justice as a result. Nevertheless, I can make no commitments as to any  
14 future positions that may be pursued by or on behalf of my clients.

15 Q DO YOU SEE A REASONABLE BALANCE OF COMPANY AND RATEPAYER INTERESTS IN  
16 THE QCA, ASSUMING APPROVAL OF THE MINOR ADJUSTMENTS THAT YOU  
17 RECOMMEND?

18 A On the one hand, it is impossible to predict the future circumstances that may affect  
19 cost recovery under the QCA. On the other hand, there are continuing concerns about  
20 coal performance and gas purchasing for the steam system. At this point I think the  
21 QCA as designed has worked reasonably well and should be continued in its present

1 form with minor adjustments limited to the establishment of a new base fuel cost and  
2 an adjustment to the coal performance standard to reflect current experience.

3 Q ARE YOU OPPOSED TO THE QCA AS MODIFIED IN THE PROPOSAL OF MR. RUSH IN  
4 THIS PROCEEDING?

5 A Yes, strongly opposed. The 100% pass-through of costs, including the elimination of  
6 the coal performance standard, would create a mechanism with no direct financial  
7 incentive to encourage cost-effective operations, maintenance, and fuel procurement.  
8 Furthermore, it would offer no protection to customers in the event of poor  
9 performance of the coal-fired boiler until after the fact and then only in the event of  
10 a determination of imprudence by the Commission. The only protection would be the  
11 after-the-fact prudence review, and as a practical matter, that shifts a great burden  
12 to Staff and customers. In my opinion, realistically, only the most egregious  
13 imprudent actions would ever be pursued so the value of the prudence review as an  
14 incentive or a remedy is very limited.

15 Q DO YOU SUPPORT THE CONTINUATION OF THE CURRENT QCA?

16 A Yes. It is far superior to use a mechanism such as the current QCA that encourages a  
17 cost-effective result in the first place and minimizes the reliance on after-the-fact  
18 reviews.

19 Q PLEASE SUMMARIZE THE MINOR ADJUSTMENTS YOU RECOMMEND.

20 A The base cost of gas should be reset. Also, the coal performance standard should be  
21 reset at a level of roughly 90% to 95% of the continuing level of operation. Also, the

1 blocking structure of the coal performance standard should accommodate reasonably  
2 expected outages.

3 Q DOES THIS CONCLUDE YOUR TESTIMONY?

4 A Yes it does.

Appendix A  
Qualifications of Donald E. Johnstone

1 Q PLEASE STATE YOUR NAME AND ADDRESS.

2 A Donald E. Johnstone. My address is 384 Black Hawk Drive, Lake Ozark, MO 65049.

3 Q PLEASE STATE YOUR OCCUPATION.

4 A I am President of Competitive Energy Dynamics, L. L. C. and a consultant in the field  
5 of public utility regulation.

6 Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

7 A In 1968, I received a Bachelor of Science Degree in Electrical Engineering from the  
8 University of Missouri at Rolla. After graduation, I worked in the customer engineering  
9 division of a computer manufacturer. From 1969 to 1973, I was an officer in the Air  
10 Force, where most of my work was related to the Aircraft Structural Integrity Program  
11 in the areas of data processing, data base design and economic cost analysis. Also in  
12 1973, I received a Master of Business Administration Degree from Oklahoma City  
13 University.

14 From 1973 through 1981, I was employed by a large Midwestern utility and  
15 worked in the Power Operations and Corporate Planning Functions. While in the  
16 Power Operations Function, I had assignments relating to the peak demand and net  
17 output forecasts and load behavior studies which included such factors as weather,  
18 conservation and seasonality. I also analyzed the cost of replacement energy  
19 associated with forced outages of generation facilities. In the Corporate Planning  
20 Function, my assignments included developmental work on a generation expansion

1 planning program and work on the peak demand and sales forecasts. From 1977  
2 through 1981, I was Supervisor of the Load Forecasting Group where my  
3 responsibilities included the Company's sales and peak demand forecasts and the  
4 weather normalization of sales.

5 In 1981, I began consulting, and in 2000, I created the firm Competitive Energy  
6 Dynamics, L.L.C. As a part of my twenty-five years of consulting practice, I have  
7 participated in the analysis of various electric, gas, water, and sewer utility matters,  
8 including the analysis and preparation of cost-of-service studies and rate analyses. In  
9 addition to general rate cases, I have participated in electric fuel and gas cost  
10 reviews and planning proceedings, policy proceedings, market price surveys,  
11 generation capacity evaluations, and assorted matters related to the restructuring of  
12 the electric and gas industries. I have also assisted companies in the negotiation of  
13 power contracts representing over \$1 billion of electricity.

14 I have testified before the state regulatory commissions of Delaware, Hawaii,  
15 Illinois, Iowa, Kansas, Massachusetts, Missouri, Montana, New Hampshire, Ohio,  
16 Pennsylvania, Tennessee, Virginia and West Virginia, and the Rate Commission of the  
17 Metropolitan St. Louis Sewer District.  
18

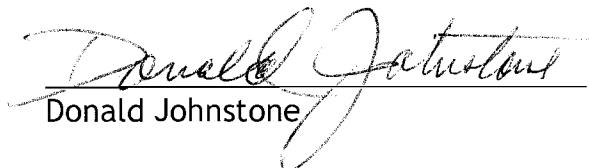
BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the Matter of the Application of	)	
Aquila, Inc. d/b/a KCP&L Greater	)	
Missouri Operations Company for	)	Case No. HR-2009-0092
Approval to Make Certain Changes in its	)	
Charges for Steam Heating Service	)	

Affidavit of Donald Johnstone

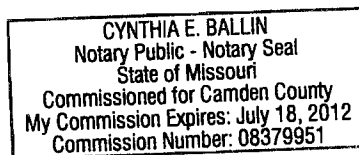
State of Missouri	)	
	)	ss
County of Camden	)	

Donald Johnstone, of lawful age, on his oath states: that he has reviewed the attached written testimony in question and answer form, all to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; that such matters are true to the best of his knowledge, information and belief.

  
Donald Johnstone

Subscribed and sworn before me this 20th day of February, 2009

  
Notary Public





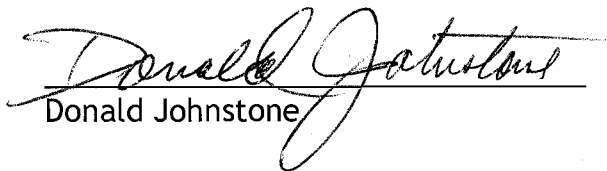
BEFORE THE  
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In the Matter of the Application of	)	
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Donald Johnstone

Subscribed and sworn before me this 21th day of February, 2009

  
Notary Public

