Exhibit No.
Witness: Maurice Brubaker
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Sedalia Industrial Energy Users Association
Subjects: Rate Design
Date: February 13, 2004

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

In the Matter of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks - L&P, Natural Gas General Rate Increase.	)))	Case No. GR-2004-0072

Rebuttal Testimony of

Maurice Brubaker

On behalf of

Sedalia Industrial Energy Users Association

February 13, 2004
Project 8118

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

In the Matter of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks - L&P, Natural Gas General Rate Increase.	)))	Case No. GR-2004-0072

Affidavit of Maurice Brubaker

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

Maurice Brubaker, being first duly sworn, on his oath states:

1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000. We have been retained by the Sedalia Industrial Energy Users Association in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony which was prepared in written form for introduction into evidence in the GR-2004-0072 Proceeding.

3. I hereby swear and affirm that my rebuttal testimony is true and correct and shows the matters and things it purports to show.

Maurice Brubaker

Subscribed and sworn before this 13th day of February, 2004.

CAROL SCHULZ
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Feb. 26, 2004

Notary Public

My Commission expires on February 26, 2004.

BEFORE THE

PUBLIC SERVICE COMMISSION OF MISSOURI

In the Matter of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks - L&P, Natural Gas General Rate Increase.	)))	Case No. GR-2004-0072

Rebuttal Testimony of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and president of Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A attached to my direct testimony.

Q WHAT ISSUES DO YOU ADDRESS IN YOUR REBUTTAL TESTIMONY?

A I address the class cost of service studies offered by the Staff of the Missouri Public Service Commission (Staff) and by the Office of Public Counsel (OPC). In particular, I address the inappropriate treatment of special contract customers and the inappropriate

allocation methodology applied to transmission and distribution mains and certain other cost elements.

I also address the testimonies of Staff and the Missouri Department of Natural Resources (DNR) concerning low income programs.

Q PLEASE SUMMARIZE THE PRINCIPAL POINTS AND CONCLUSIONS FROM YOUR REBUTTAL TESTIMONY.

A They may be summarized as follows:

1) Both Staff and OPC have used methods for allocation of transmission and distribution mains that are inappropriate. They are inappropriate for the following reasons.

   a. The Staff capacity utilization (CU) method and the OPC RSUM method both ignore the fact that facilities must be sized to meet peak demands. The fact that some customers do not use as much in certain months as in peak months in no way affects the investment required to meet their loads during the peak months. By employing these non-traditional methods, both Staff and OPC try to reduce the costs allocated to customers with high peaking requirements by inappropriately allocating large amounts of costs to non-peak months and therefore to customers with more consistent usage patterns.

   b. The OPC allocation methodology contains another non-traditional element – an "economies of scale" argument on investment in larger sized mains versus smaller sized mains. Not only is the rationale for the methodology not explained by the offering witnesses but, there is no basis provided for the adjustment factors utilized.

2) Staff and OPC have used the same allocation factors for both transmission mains and distribution mains. This is wrong because the transmission mains serve an entirely different purpose than the distribution mains. The transmission mains feed the distribution mains. Then, the distribution mains move gas from the transmission system to the individual points of receipt of the many residential and commercial customers whose facilities are located throughout Aquila's extensive geographic network service area. For this reason, in the allocation of distribution mains there must be a significant recognition of the number of customers served. Aquila's methodology explicitly recognizes this important aspect, while the method employed by both Staff and OPC does not.

3) Both Staff and OPC have inappropriately included the contract transportation customers in the tariff transportation class. Costs are allocated to these customers and their revenues are added to the revenues of the other customers in the class. This is inappropriate because any margin shortfall from these customers is assigned exclusively to other members of the same class. Presumably, the purpose of special

contracts is to retain load on the system – which benefits all customers. The more appropriate method to handle these customers is that employed by Aquila – namely to exclude them from explicit cost allocation and to credit their margin revenues back to all other customers in all classes.

4) Both Staff and DNR offer proposals to fund weatherization programs for low-income customers. Staff goes further and proposes to implement a discount rate program for certain low-income customers who participate in the weatherization program. In regard to these proposals, my position is as follows:

   a. To the extent cost-effective weatherization programs are funded by ratepayer dollars, the funding should come from the class in which the low-income consumers reside. This is appropriate because reduced volumes result in reduced costs being allocated to that class, while the cost allocated to other classes actually increase.

   b. The rate discount program proposed by Staff is unbounded and I have seen no cost estimates for it. Furthermore, no basis has been shown for offering these discounts, but if they are offered, then they should be charged to the customers in which the low-income consumers reside because they are pure social welfare programs.

Allocation of Transmission and Distribution Mains

Q HOW HAS STAFF DEVELOPED ITS ALLOCATION FACTORS FOR TRANSMISSION MAINS?

A As noted in my summary, Staff has used something called the capacity utilization or CU method.

Q IS THE CU METHOD BASED ON COST-CAUSATION?

A No, it is not and Staff flatly admits that it is not at page 5 of the testimony of Staff witness Thomas Imhoff. In describing the CU method, he states at line 17 of page 5, the following with respect to mains:

> "While the diameters of the pipes used in that system are sized to carry sufficient volumes to meet peak day demands, the "***value***" to the customer from the system occurs throughout the year, not just on the peak day. The allocation of the cost of mains should reflect the total value that customers derive from the service throughout the year." (Emphasis supplied)

Mr. Imhoff provides no justification for either his measurement of "***value***," nor does he explain why "***value***" should be the basis for allocating costs, as opposed to the traditional method of cost-causation.

Q WHAT IS YOUR RECOMMENDATION WITH RESPECT TO MR. IMHOFF'S METHODOLOGY?

A Obviously, it should be rejected. It does not even pretend to be based on cost-causation – as explicitly acknowledged by witness Imhoff. It is, as he acknowledges, based on some vague notion of value, and is nothing more than an attempt to reduce the cost allocated to customers who have seasonal peaking requirements. The methodology employed is not a traditional methodology and is not accepted in the industry. By allocating large amounts of costs to off-peak periods, the CU method under-allocates costs to customers who have high peaking requirements relative to their demands in other periods of the year, and over-allocates costs to customers who have more consistent requirements for natural gas service. Since there is no real debate about the fact that mains must be sized to meet peak demands, Staff's method must be rejected. Traditional methods that recognize cost-causation must be used.

Q IS OPC'S METHOD SIMILAR?

A Yes. As noted above, OPC uses something called RSUM. It is basically the same kind of methodology as employed by Staff, it just goes by a different name. It should be rejected for the same reason.

Q ARE THE CU AND RSUM METHODS ACCEPTED IN THE INDUSTRY?

A No. Neither is an accepted methodology.

Q ARE THERE ANY OTHER ASPECTS TO OPC'S METHODOLOGY FOR ALLOCATING TRANSMISSION AND DISTRIBUTION MAINS THAT DESERVE COMMENT?

A Yes. OPC adds a dimension related to "economies of scale" by further modifying its RSUM to allocate even more costs to customers with relatively consistent throughput.

Q WHERE IN THE OPC TESTIMONY IS THIS EXPLAINED?

A OPC witness Barbara Meisenheimer provides a very general description of the concept of economies of scale, and refers to individuals who previously performed work in this area, but who no longer work for OPC or Staff and who certainly are not appearing as witnesses in this proceeding. OPC witness James Busch, simply notes that witness Meisenheimer describes the concept, and then says on page 9 of his testimony that he raises the capacity allocation percentages to the power of 0.3, referring to the same non-witness as does Ms. Meisenheimer.

Q IS THE ADJUSTMENT PROPOSED BY THESE WITNESSES ACCEPTED IN THE INDUSTRY?

A No. Other than in Missouri, I have never seen anyone propose this methodology, and certainly am not aware of any Commission that has adopted it.

Q SHOULD THIS ADJUSTMENT BE ACCEPTED?

A No, it should not.

Q HAVE BOTH OPC AND STAFF USED THE SAME ALLOCATION FACTORS FOR DISTRIBUTION MAINS AS THEY HAVE USED FOR TRANSMISSION MAINS?

A Yes, they have.

Q IS THIS APPROPRIATE?

A No. A significant portion of the investment in distribution mains is required to provide network coverage of the entire geographic area of the service territory to enable Aquila to serve the residential and smaller commercial customers, many of whom are located a significant distance from the transmission system or from city gate delivery points. Allocating these costs on the same basis as the transmission mains (demands and/or volumes), which feed these extensive networks without regard to the number of customers served, is wrong.

Q DID AQUILA RECOGNIZE THE AREA COVERAGE FUNCTION FOR THIS DISTRIBUTION MAIN NETWORK?

A Yes. Aquila's approach is conventional. It allocates the investment in distribution mains using a combination of peak demand and number of customer services. This is the appropriate and traditional approach and, in the absence of a more specific and detailed analysis of the distribution system, is the appropriate approach.

Treatment of Contract Customers

Q DOES AQUILA SERVE CERTAIN CUSTOMERS UNDER SPECIAL TRANSPORTATION CONTRACTS THAT ARE DIFFERENT FROM THE TARIFF RATES?

A Yes. Aquila has a number of such customers.

Q HOW DID OPC AND STAFF TREAT THESE CUSTOMERS IN THEIR COST OF SERVICE STUDIES?

A They included the volumes and demands of these customers in the transportation class for purposes of cost allocation and allocated cost to this combined class. The revenues from these contracts were then added to the tariff revenues from the other transportation customers.

Q HOW DOES THIS DIFFER FROM AQUILA'S APPROACH?

A The approach used by Aquila, and which I adopted in my direct testimony, does not include the volumes or demands of these customers in the allocation factors, but rather treats them as a system sale. In the cost study the costs of the system are allocated to all tariff customers, and then the revenues from the contract customers are credited to all customer classes as an offset to cost of service.

Q WHICH APPROACH IS APPROPRIATE?

A Aquila's approach is appropriate.

Q WHY IS IT APPROPRIATE?

A Aquila's approach recognizes that these special contracts were approved by the Commission because doing so was beneficial to the system. Otherwise, the Commission would presumably not have approved them. These contracts usually are for the purpose of retaining a load in cases where customers have alternative means of supply. The ability to retain the customers on the system and therefore spread the fixed costs over larger volumes is generally considered to be a benefit to the entire system, and therefore the treatment adopted by Aquila is the appropriate one. The treatment

proposed by OPC and Staff would have the effect of further driving up the rates for tariff transportation customers, and could result in the need for additional special contracts in order to retain additional loads that would now be priced in excess of their alternatives.

Low-Income Programs

Q HAVE STAFF AND DNR PROPOSED LOW-INCOME WEATHERIZATION PROGRAMS?

A Yes, they have. Although few details are provided, the proposal has been made to establish a special ratepayer-funded weatherization program aimed at low income consumers.

Q ARE ENERGY EFFICIENCY PROGRAMS DESIRABLE?

A They are desirable if they are shown to be cost-effective. Improvements in energy efficiency, without regard to the cost of achieving those improvements are not desirable. Therefore, if any such program is established there must be specific parameters and guidelines and a requirement that the weatherizations undertaken first be shown to be cost-effective.

Q IF THE USAGE OF INDIVIDUAL DWELLINGS IS REDUCED, WHAT DOES THIS DO TO THE ALLOCATION OF COSTS?

A In general, it will reduce the allocation of cost to the class in which the occupant of the structure is served, and therefore will reduce the cost allocated to that class. Although the individual consumer who received the benefits of the weatherization will be the largest winner, other members of the class will also benefit. At the same time, allocations of cost to other classes will increase because the fixed costs are now being

spread over a smaller amount of sales. This will tend to increase the rates of customers in other classes.

Q WHAT IMPLICATION DOES THIS PHENOMENON HAVE FOR RECOVERY OF THE COST OF ANY SUCH PROGRAM?

A The implication is that the most reasonable approach to funding any such program that is going to be ratepayer funded is from the class of customers in which the occupant of the weatherized premise is served.

Q DOES STAFF OFFER ANY ADDITIONAL RECOMMENDATIONS WITH RESPECT TO LOW-INCOME CONSUMERS?

A Yes. Staff witness Anne Ross proposes a subsidy program for low-income consumers. She proposes it as an experiment and wants to fund it with $50,000.

Q HOW DOES SHE PROPOSE TO RECOVER THIS COST?

A She proposes to recover the revenue loss resulting from these discounts from other customers through higher margin rates.

Q HAS SHE PROVIDED ANY ESTIMATE OF POTENTIAL REVENUE LOSS ASSOCIATED WITH THIS PLAN?

A No, she has not.

Q DO YOU BELIEVE IT WOULD BE APPROPRIATE TO IMPLEMENT THIS PROGRAM?

A No, I do not. This is purely a social welfare type of program, and should not be something in which the utility or its other customers are forced to participate. Funding for such programs is either a legislative function, or should be handled by charitable agencies who receive voluntary contributions. It is most inappropriate to tax other consumers for these programs.

However, to the extent that any such program is implemented, it should be funded strictly within the residential class so as to not further affect the competitiveness of business enterprises who take gas service from Aquila.

Q DO THESE WITNESSES ATTEMPT TO JUSTIFY THE PROPOSALS, AT LEAST IN PART, BY ARGUING THAT THEY WOULD RESULT IN LOWER UNCOLLECTIBLE ACCOUNTS?

A Yes, they do. However, they do not provide any specific support for this position. Rather, they choose to cite articles and orders from other jurisdictions without either establishing that there is a comparability of circumstances, or showing that the programs proposed would be cost effective in any respect.

Furthermore, while it is certainly true that not paying a $100 gas bill produces a smaller uncollectible account than not paying a $150 gas bill, there is no demonstration by either of these witnesses that the costs incurred to achieve such a result would be less than the alleged $50 benefit.

Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A Yes, it does.