

Exhibit No.:  
Issue(s):  
Witness:  
Sponsoring Party:  
Case No.:

Rate of Return  
Trippensee/Direct  
Public Counsel  
ER-2007-0004

**DIRECT TESTIMONY**  
**OF**  
**RUSSELL W. TRIPPENSEE**

**FILED**  
MAY 3 2007  
Missouri Public  
Service Commission

Submitted on Behalf of  
The Office of the Public Counsel

**AQUILA, INC.**

**Case No. ER-2007-0004**

January 18, 2007

*OPC Exhibit No. 403*  
*Date 4-4-07 Case No. ER-2007-0004*  
*Reporter MV*

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

In the matter of Aquila, Inc. d/b/a )  
Aquila Networks-MPS and Aquila )  
Networks-L&P, for authority to file )  
tariffs increasing electric rates for the )  
service provided to customers in the )  
Aquila Networks-MPS and )  
Aquila Networks-L&P service area. )

**Case No. ER-2007-0004**

**AFFIDAVIT OF RUSSELL W. TRIPPENSEE**

STATE OF MISSOURI    )  
                                  )    ss  
COUNTY OF COLE    )

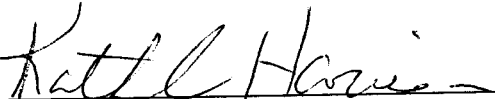
Russell W. Trippensee, of lawful age and being first duly sworn, deposes and states:

1. My name is Russell W. Trippensee. I am the Chief Public Utility Accountant for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my direct testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
Russell W. Trippensee

Subscribed and sworn to me this 18th day of January 2007.



  
Kathleen Harrison  
Notary Public

My commission expires January 31, 2010.

**DIRECT TESTIMONY**  
**OF**  
**RUSSELL W. TRIPPENSEE**  
**AQUILA, INC.**  
**CASE NO. ER-2007-0004**

1 **Q. PLEASE STATE YOUR NAME AND ADDRESS.**

2 A. Russell W. Trippensee. I reside at 1020 Satinwood Court, Jefferson City, Missouri 65109, and my  
3 business address is P.O. Box 2230, Jefferson City, Missouri 65102.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am the Chief Utility Accountant for the Missouri Office of the Public Counsel (OPC or Public  
6 Counsel).

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

8 A. I attended the University of Missouri at Columbia, from which I received a BSBA degree, major in  
9 Accounting, in December 1977. I also acquired the requisite hours for a major in Finance. I attended  
10 the 1981 NARUC Annual Regulatory Studies Program at Michigan State University.

11 **Q. ARE YOU A CERTIFIED PUBLIC ACCOUNTANT?**

12 A. Yes, I hold certificate/license number 2004012797 in the State of Missouri.

13 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

14 A. From May through August, 1977, I was employed as an Accounting Intern by the Missouri Public  
15 Service Commission (MPSC or Commission). In January 1978 I was employed by the MPSC as a  
16 Public Utility Accountant I. I left the MPSC Staff (Staff) in June 1984 as a Public Utility Accountant  
17 III and assumed my present position.

18

19

1 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS.**

2 A. I served as the chairman of the Accounting and Tax Committee for the National Association of State  
3 Utility Consumer Advocates from 1990-1992 and am currently a member of the committee. I am a  
4 member of the Missouri Society of Certified Public Accountants.

5 **Q. PLEASE DESCRIBE YOUR WORK WHILE YOU WERE EMPLOYED BY THE MPSC**  
6 **STAFF.**

7 A. Under the direction of the Chief Accountant, I supervised and assisted with audits and examinations  
8 of the books and records of public utility companies operating within the State of Missouri with  
9 regard to proposed rate increases.

10 **Q. WHAT IS THE NATURE OF YOUR CURRENT DUTIES WITH THE OFFICE OF**  
11 **THE PUBLIC COUNSEL?**

12 A. I am responsible for the Accounting section of the Office of the Public Counsel and coordinating our  
13 activities with the rest of our office and other parties in rate proceedings. I am also responsible for  
14 performing audits and examinations of public utilities and presenting the findings to the MPSC on  
15 behalf of the public of the State of Missouri.

16 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE MPSC?**

17 A. Yes. I filed testimony in the cases listed on Schedule RWT-1 of my testimony on behalf of the  
18 Missouri Office of the Public Counsel or MPSC Staff.

19 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

20 A. To address the revenue requirement implications if a Fuel Adjustment Clause (FAC) is authorized by  
21 the Commission for Aquila's operating divisions, Missouri Public Service (MPS) and St. Joseph

1 Light & Power (L&P). Specifically, I will address the impact on the authorized return on equity and  
2 the overall rate of return. Inherent in return on equity is a risk component and the change in this risk  
3 must be accounted for, if the proposed change in rate design is adopted that incorporates a FAC. The  
4 authorized return on equity is used to determine the overall rate of return which has a direct impact on  
5 the revenue requirement.

6 **Q. DOES PUBLIC COUNSEL SUPPORT A FUEL ADJUSTMENT CLAUSE FOR**  
7 **AQUILA?**

8 A. No. Public Counsel witness Ryan Kind will address the basis for this opposition in his direct  
9 testimony along with other considerations.

10 **Fuel Adjustment Clause – Risk Reduction**

11 **Q. PLEASE EXPLAIN HOW PUBLIC COUNSEL’S WITNESSES WILL ADDRESS**  
12 **CONCERNS REGARDING FUEL ADJUSTMENT CLAUSES AND ITS SPECIFIC**  
13 **APPLICATION TO AQUILA.**

14 A. I will address the impacts of the change in risk Aquila will face if a FAC is authorized by this  
15 Commission and how the Commission should recognize this change in the authorized return on  
16 equity. Public Counsel witness Ryan Kind will also address aspects of the FAC.

17 **Q. PLEASE EXPLAIN THE RELATIONSHIP BETWEEN REVENUE REQUIREMENT**  
18 **AND A FUEL ADJUSTMENT CLAUSE.**

19 A. A FAC is a method that can be used to develop tariffs that are designed to recover revenue  
20 requirement from customers. Under traditional regulatory processes used in Missouri, the revenue

1 requirement is only minimally affected by the rate design methods. A FAC represents a major shift in  
2 the rate design method.

3 One of the basic purposes of rate design is to develop tariff rates that will bill the customers for an  
4 amount equal to the total revenue requirement over the course of the ensuing years under the  
5 assumption that all factors during that year occur just as anticipated in the development of the revenue  
6 requirement. A significant majority of the revenue requirement is collected via tariff rates that result  
7 in customer bill components that are fixed on a monthly basis (normally called a customer charge) or  
8 vary month to month based on usage (normally called a commodity charge).

9 **Q. IS IT A REASONABLE ASSUMPTION THAT ALL FACTORS DURING THE**  
10 **ENSUING YEARS WILL ACTUALLY BE THE SAME AS THOSE USED IN THE**  
11 **DEVELOPMENT OF THE REVENUE REQUIREMENT?**

12 A. Public utilities are dynamic industries that serve a dynamic economy. A multitude of changes occur  
13 each and every day for a large electric utility. However, the regulatory practice of looking at earnings  
14 addresses that dynamic environment because it is the relationship of revenue less expense as a  
15 percentage of investment (i.e. return on equity) that is critical to the process. Each and every factor in  
16 the utility's operations could change, customer levels could change, and other factors influencing the  
17 earnings could change. However if the resulting earnings remain equal to that authorized by the  
18 Commission, the tariff rates remain reasonable until such time as the Commission determines a  
19 different return on equity is appropriate.

20 **Q. HOW DOES A FUEL ADJUSTMENT CLAUSE CHANGE THE REGULATORY RATE**  
21 **OF RETURN MODEL?**

1 A. FACs are designed to recover specific costs, usually limited to fuel and fuel related costs to operate  
2 electric generation power plants and purchased power costs. Therefore the resulting FAC rates result  
3 in revenue that equals the specific costs to be recovered over time, and any potential impact on  
4 earnings is removed. A FAC is nothing more than a complex cost recovery system which will take  
5 significant regulatory resources in order to provide the ratepayer protection.

6 **Q. WHAT IS THE RELATIONSHIP BETWEEN REVENUES, FUEL EXPENSE, AND**  
7 **EARNINGS UNDER TRADITIONAL REGULATION?**

8 A. The component of the tariff rate, usually the commodity charge, is based on the level of fuel expense  
9 (and other costs that would be included in a FAC) used in the determination of the revenue  
10 requirement. Over time, the level of usage changes, thus creating a difference between those  
11 revenues assumed in the rate case. Similarly, over time due to price changes, actions by utility  
12 management, or other events, fuel expense changes creating a difference from the rate case. The net  
13 result is that the change in actual revenues and fuel expense subsequent to the rate case in all  
14 likelihood results in a level of earnings different than that authorized by the Commission.

15 **Q. DOES A FUEL ADJUSTMENT CLAUSE RESULT IN A CHANGE IN THE**  
16 **POTENTIAL FOR VARIABILITY IN EARNINGS OF A UTILITY?**

17 A. Yes, a FAC has the potential to eliminate the impact of fuel expense and the resulting FAC revenues  
18 on the earnings of a utility. The utility can neither increase earnings by operating their generating  
19 stations more efficiently nor can earnings decline due to factors such as increased costs or reduced  
20 customer usage. It should be noted that a FAC removes a significant financial incentive to utility  
21 management as it decouples their actions from earnings absent appropriate regulatory oversight of the

1 FAC. Even with appropriate regulatory oversight, the financial implications of management actions  
2 would be removed from the time period during which the action occurred.

3 **Q. IS VARIABILITY OF EARNINGS A RISK THAT ALL COMPANIES FACE?**

4 A. Yes, variability of earnings is a business risk that companies face. The degree of variability creates  
5 different levels of risk.

6 **Q. COULD YOU DEFINE THE RISK AND THE EXPLAIN THE FUNDAMENTAL  
7 DIFFERENCES BETWEEN BUSINESS RISK AND FINANCIAL RISK?**

8 A. Yes. Risk can be defined as the possibility that actual earnings from an asset or an investment may  
9 differ from expected earnings. The wider the range of possible earnings, the greater the risk  
10 associated with that asset or investment.

11 **Business risk** is the uncertainty (variability) associated with earnings due to fundamental business  
12 conditions faced by the company, such as cyclical markets, weather-sensitive sales, changing  
13 technology, unforeseen events, or competition. Business risk is the *inherent riskiness of a firm's*  
14 *assets* due to the operations of the company and the industry in which in operates. In other words,  
15 business risk is not connected to the way the firm finances its assets. The following summarizes  
16 business risk.

17 Business risk is defined as the uncertainty inherent in the projections of future  
18 returns on assets (ROA), and it is the single most important determinant of capital  
19 structure.

20 (Fundamentals of Financial Management, Eugene F Brigham & Joel F. Houston,  
21 Eighth edition, page 493)

22 **Financial risk** is the uncertainty associated with earnings available to common shareholders due to  
23 debt and/or preferred stock being used to finance the firm's assets. This additional risk stems from



1 the fact that cash flows to common shareholders are subordinate to a firm's required debt service (i.e.  
2 a firm must pay its debt service and any preferred dividends before it can pay common dividends.)  
3 From a common shareholder's perspective, a firm with less debt and preferred stock in its capital  
4 structure has fewer bills to pay before it can allocate earnings to common dividends, and is therefore  
5 less risky. The following summarizes financial risk.

6 financial risk is the additional risk placed on the common stockholders as a result of  
7 financial leverage.  
8 (Fundamentals of Financial Management, Eugene F Brigham & Joel F. Houston,  
9 Eight edition, page 498)

10 **Q. DOES A FUEL ADJUSTMENT CLAUSE SIGNIFICANTLY REDUCE THE**  
11 **VARIABILITY OF REVENUES?**

12 A. Yes. Absent a FAC, the actions of Aquila in the operation of its power plants create opportunities to  
13 increase profits with sound and prudent decisions. Conversely, poor decisions will most likely cause  
14 decreased earnings. There are also other factors that can affect earnings related to fuel costs thus  
15 creating additional probability of earnings variation.

16 **Q. WHAT IS THE IMPLICATION OF A FUEL ADJUSTMENT CLAUSE ON THE**  
17 **EARNINGS OF THE COMPANY?**

18 A. The fuel cost associated with serving the customer would be collected in total through a process that I  
19 would anticipate include the initial charge for costs to be recovered and a secondary adjustment that  
20 reconciles actual charges billed with cost intended to be billed. Thus Aquila would effectively  
21 eliminate any earnings variability related to fuel costs for those customer classes who have a FAC as  
22 part of their tariffed rate. Thus the risk of earnings variability related to fuel costs will be virtually  
23 eliminated for these customer classes and greatly reduced for Missouri jurisdictional operations.

1 | **Q. SHOULD THE ELIMINATION OR SIGNIFICANT REDUCTION OF BUSINESS**  
2 | **RISK RESULTING FROM A FUEL ADJUSTMENT CLAUSE HAVE AN IMPACT**  
3 | **ON THE RATE OF RETURN ON EQUITY AUTHORIZED BY THE MPSC?**

4 | A. Yes. Failure to recognize the reduction in business risk resulting from a significant decline in the  
5 | potential variability of earnings would result in rates being paid by customers that compensate  
6 | stockholders for a risk they no longer have, therefore such rates would not be just and reasonable.

7 | **Q. HAVE OTHER AUTHORITIES AND UTILITIES RECOGNIZED THAT A**  
8 | **PROCESS THAT MITIGATES THE IMPACT OF FUEL ADJUSTMENT CLAUSES**  
9 | **ON EARNINGS SHOULD BE CONSIDERED IN THE AUTHORIZED RATE OF**  
10 | **RETURN?**

11 | A. Yes. SB179 contained the following language

12 |           The commission may take into account any change in business risk to the  
13 |           corporation resulting from implementation of the adjustment mechanism in setting  
14 |           the corporation's allowed return in any rate proceeding, in addition to any other  
15 |           changes in business risk experienced by the corporation.  
16 |           (Section 386.266.8 RSMo 2005 Supp.)

17 | **Q. DOES A FUEL ADJUSTMENT CLAUSE ELIMINATE WEATHER RISK AS IT**  
18 | **RELATES TO FUEL COSTS?**

19 | A. Yes. The reconciliation procedure in a FAC (I assume it would be similar to the ACA process in a  
20 | Purchased Gas Adjustment proceeding) will account for the difference in actual sales versus the level  
21 | of sales used to calculate the initial FAC. Likewise, any change in fuel cost from that level built into  
22 | the FAC will also be addressed in the reconciliation process or the next FAC.

1 | **Q. DOES A FUEL ADJUSTMENT CLAUSE ELIMINATE FINANCIAL RISK OF A**  
2 | **PUBLIC UTILITY?**

3 | A. No. Common stock's subordinate status to secured debt with respect to debt service is a legal  
4 | principle that is not changed by rate design or other actions by this Commission.

5 | **Q. DOES RISK PROVIDE AN IMPORTANT INCENTIVE TO MANAGEMENT OF THE**  
6 | **COMPANY?**

7 | A. Yes. It is reasonable to believe that utility managers are risk adverse. Therefore, in order to mitigate  
8 | the effects of risks such as weather, rising fuel costs, volatility of specific fuels such as natural gas,  
9 | and other factors effecting total fuel costs a electric utility's management has an incentive to take  
10 | steps to not only operate the utility in an efficient manner but also plan its acquisition of generation  
11 | resources appropriately . If the financial impacts of these decisions are removed via a mechanism that  
12 | assures cost recovery, the incentive to operate the utility efficiently is also reduced because the risk to  
13 | which management would be adverse has been reduced or eliminated. It could be argued that the  
14 | reduction in risk as a result of a change in rate design would similarly reduce the incentive to find new  
15 | efficiencies or at least reduce the level of priority placed on such activities. Public Counsel does not  
16 | believe ratepayers are protected by removing financial incentives for management efficiency leaving  
17 | only the possibility of after-the-fact regulatory oversight through prudency reviews as an incentive for  
18 | management efficiency.

19 | **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

20 | A. Yes.

Direct Testimony  
Russell W. Trippensee  
Case No. ER-2007-0004

Missouri Power & Light Company, Steam Dept., Case No. HR-82-179  
Missouri Power & Light Company, Electric Dept., Case No. ER-82-180  
Missouri Edison Company, Electric Dept., Case No. ER-79-120  
Southwestern Bell Telephone Company, Case No. TR-79-213  
Doniphan Telephone Company, Case No. TR-80-15  
Empire District Electric Company, Case No. ER-83-43  
Missouri Power & Light Company, Gas Dept., Case No. GR-82-181  
Missouri Public Service Company, Electric Dept., Case No. ER-81-85  
Missouri Water Company, Case No. WR-81-363  
Osage Natural Gas Company, Case No. GR-82-127  
Missouri Utilities Company, Electric Dept., Case No. ER-82-246  
Missouri Utilities Company, Gas Dept., Case No. GR-82-247  
Missouri Utilities Company, Water Dept., Case No. WR-82-248  
Laclede Gas Company, Case No. GR-83-233  
Great River Gas Company, Case No. GR-85-136 (OPC)  
Northeast Missouri Rural Telephone Company, Case No. TR-85-23 (OPC)  
United Telephone Company, Case No. TR-85-179 (OPC)  
Kansas City Power & Light Company, Case No. ER-85-128 (OPC)  
Arkansas Power & Light Company, Case No. ER-85-265 (OPC)  
KPL/Gas Service Company, GR-86-76 (OPC)  
Missouri Cities Water Company, Case Nos. WR-86-111, SR-86-112 (OPC)  
Union Electric Company, Case No. EC-87-115 (OPC)  
Union Electric Company, Case No. GR-87-62 (OPC)  
St. Joseph Light and Power Company, Case Nos. GR-88-115, HR-88-116 (OPC)  
St. Louis County Water Company, Case No. WR-88-5 (OPC)  
West Elm Place Corporation, Case No. SO-88-140 (OPC)  
United Telephone Long Distance Company, Case No. TA-88-260 (OPC)  
Southwestern Bell Telephone Company, Case No. TC-89-14, et al. (OPC)  
Osage Utilities, Inc., Case No. WM-89-93 (OPC)  
GTE North Incorporated, Case Nos. TR-89-182, TR-89-238, TC-90-75 (OPC)  
Contel of Missouri, Inc., Case No. TR-89-196 (OPC)  
The Kansas Power and Light Company, Case No. GR-90-50 (OPC)  
Southwestern Bell Telephone Company, Case No. TO-89-56 (OPC)  
Capital City Water Company, Case No. WR-90-118 (OPC)  
Laclede Gas Company, Case No. GR-90-120 (OPC)  
Southwestern Bell Telephone Company, Case No. TR-90-98 (OPC)

Direct Testimony  
Russell W. Trippensee  
Case No. ER-2007-0004

Empire District Electric Company, Case No. ER-90-138 (OPC)  
Associated Natural Gas Company, Case No. GR-90-152 (OPC)  
Southwestern Bell Telephone Company, Case No. TO-91-163 (OPC)  
Union Electric Company, Case No. ED-91-122 (OPC)  
Missouri Public Service, Case Nos. EO-91-358 and EO-91-360 (OPC)  
The Kansas Power and Light Company, Case No. GR-91-291 (OPC)  
Southwestern Bell Telephone Co., Case No. TO-91-163 (OPC)  
Union Electric Company, EM-92-225 and EM-92-253 (OPC)  
Southwestern Bell Telephone Company, TO-93-116(OPC) (OPC)  
Missouri Public Service Company, ER-93-37, (January, 1993) (OPC)  
Southwestern Bell Telephone Company, TO-93-192, TC-93-224 (OPC)  
Saint Louis County Water Company, WR-93-204 (OPC)  
United Telephone Company of Missouri, TR-93-181 (OPC)  
Raytown Water Company, WR-94-300 (OPC)  
Empire District Electric Company, ER-94-174 (OPC)  
Raytown Water Company, WR-94-211 (OPC)  
Missouri Gas Energy, GR-94-343 (OPC)  
Capital City Water Company, WR-94-297 (OPC)  
Southwestern Bell Telephone Company, TR-94-364 (OPC)  
Missouri Gas Energy, GR-95-33 (OPC)  
St. Louis County Water Company, WR-95-145 (OPC)  
Missouri Gas Energy, GO-94-318 (OPC)  
Alltel Telephone Company of Missouri, TM-95-87 (OPC)  
Southwestern Bell Telephone Company, TR-96-28 (OPC)  
Steelville Telephone Exchange, Inc., TR-96-123 (OPC)  
Union Electric Company, EM-96-149 (OPC)  
Imperial Utilites Corporation, SC-96-247 (OPC)  
Laclede Gas Company, GR-96-193 (OPC)  
Missouri Gas Energy, GR-96-285 (OPC)  
St. Louis County Water Company, WR-96-263 (OPC)  
Village Water and Sewer Company, Inc. WM-96-454 (OPC)  
Empire District Electric Company, ER-97-82 (OPC)  
UtiliCorp d/b/a Missouri Public Service Company, GR-95-273 (OPC)  
Associated Natural Gas, GR-97-272 (OPC)  
Missouri Public Service, ER-97-394, ET-98-103 (OPC)  
Missouri Gas Energy, GR-98-140 (OPC)

Direct Testimony  
Russell W. Trippensee  
Case No. ER-2007-0004

St. Louis County Water, WO-98-223 (OPC)  
United Water Missouri, WA-98-187 (OPC)  
Kansas City Power & Light/Western Resources, Inc. EM-97-515 (OPC)  
St. Joseph Light & Power Company, HR-99-245 (OPC)  
St. Joseph Light & Power Company, GR-99-246 (OPC)  
St. Joseph Light & Power Company, ER-99-247 (OPC)  
AmerenUE, EO-96-14, (prepared statement) (OPC)  
Missouri American Water Company, WR-2000-281 (OPC)  
Missouri American Water Company, SR-2000-282 (OPC)  
UtiliCorp United Inc./St. Joseph Light & Power Company, EM-2000-292 (OPC)  
UtiliCorp United Inc./Empire District Electric Company, EM-2000-369 (OPC)  
St. Joseph Light & Power Company, EO-2000-845 (OPC)  
St. Louis County Water Company, WR-2000-844 (OPC)  
Union Electric Company, EO-2001-245 (OPC)  
Laclede Gas Company, GM-2001-342 (OPC)  
Empire District Electric Company, ER-2001-299 (OPC)  
Missouri-American Water Company, et. al., WM-2001-309 (OPC)  
AmerenUE, EC-2002-152, GC-2002-153 (OPC)  
UtiliCorp United Inc., ER-2001-672 (OPC)  
Aquila, Inc., GO-2002-175 (OPC)  
AmerenUE, ER-2002-001 (OPC)  
Laclede Gas Company, GA-2002-429 (OPC)  
AmerenUE, GR-2003-0517 (OPC)  
Algonquin Water Resources of Missouri & Silverleaf Resort, Inc. WO-2005-0206 (OPC)  
Kansas City Power & Light Company, Case No. EO-2005-0329 (OPC)  
Empire District Electric Company, Case No. ER-2006-0315 (OPC)  
Kansas City Power & Light Company, Case No. ER-2006-0314 (OPC)  
Atmos Energy Corporation, Case No. GR-2006-0387 (OPC)  
Missouri Gas Energy, Case No. GR-2006-0422 (OPC)  
Aquila, Inc., ER-2007-0004 (OPC)