MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

AMANDA C. McMELLEN

AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)

CASE NOS. ER-2004-0034 and HR-2004-0024 (Consolidated)

Jefferson City, Missouri
December 2003

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

In the matter of Aquila, Inc. d/b/a Aquila networks L&P and Aquila Networks MPS to implement a general rate increase in electricity.	))))	Case No. ER-2004-0034
In the matter of Aquila, Inc. d/b/a Aquila networks L&P to implement a general rate increase in Steam Rates.	)))	Case No. HR-2004-0024

AFFIDAVIT OF AMANDA C. MCMELLEN
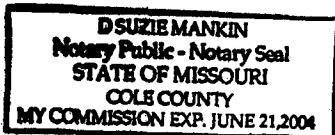
STATE OF MISSOURI	)	
	)	ss.
COUNTY OF COLE	)	

Amanda C. McMellen, of lawful age, on her oath states: that she has participated in the preparation of the following Direct Testimony in question and answer form, consisting of ___14___ pages to be presented in the above case; that the answers in the following Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Amanda C. McMellen
Amanda C. McMellen

Subscribed and sworn to before me this _5th_ day of December 2003.

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D SUZIE MANKIN
Notary Public - Notary Seal
STATE OF MISSOURI
COLE COUNTY
MY COMMISSION EXP. JUNE 21,2004
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_____
Notary Public

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6   **CASE NOS. ER-2004-0034 AND HR-2004-0024**

7   **(Consolidated)**

15

DIRECT TESTIMONY

OF

AMANDA C. McMELLEN

AQUILA, INC., d/b/a AQUILA NETWORKS-MPS (Electric)

and AQUILA NETWORKS-L&P (Electric and Steam)

CASE NOS. ER-2004-0034 AND HR-2004-0024

(Consolidated)

Q.   Please state your name and business address.

A.   Amanda C. McMellen, 200 Madison Street, Suite 440, Jefferson City, MO 65102.

Q.   By whom are you employed and in what capacity?

A.   I am a Regulatory Auditor for the Missouri Public Service Commission (Commission).

Q.   Please describe your educational and employment background.

A.   I graduated from DeVry Institute of Technology in June 1998 with a Bachelors of Science degree in Accounting. Before coming to work at the Commission, I worked as an accounts receivable clerk. I commenced employment with the Commission Staff (Staff) in June 1999.

Q.   What has been the nature of your duties while employed by the Commission?

A.   I am responsible for assisting in the audits and examinations of the books and records of utility companies operating within the state of Missouri.

Q.   Have you previously filed testimony before this Commission?

1   A.   Yes, please refer to Schedule 1, attached to this direct testimony, for a list of

2 the major audits on which I have assisted and filed testimony.

3   Q.   Have you made an examination of the books and records of Aquila

4 Networks-MPS (MPS) and Aquila Networks-L&P (L&P), divisions of Aquila, Inc. (Aquila or

5 the Company) for purposes of this case?

6   A.   Yes, with the assistance of other members of the Staff.

7   Q.   When were these cases filed?

8   A.   The Company filed both these cases on July 3, 2003. They were designated

9 as Case No. ER-2004-0034 for Aquila's Missouri electric operations and Case

10 No. HR-2004-0024 for the Missouri steam operations. These two cases have been

11 consolidated by the Commission in its Order Consolidating Cases, issued July 24, 2003.

12   Q.   Will your testimony relate to both of these cases?

13   A.   No. My testimony only relates to MPS and L&P electric operations.

14   Q.   Please describe your areas of responsibility in Case Nos. ER-2004-0034 and

15 HR-2004-0024.

16   A.   I am responsible for the areas of electric and steam revenue annualizations and

17 uncollectibles (bad debts) expense for both MPS and L&P.

18   Q.   Please describe what adjustments you are sponsoring in this case.

19   A.   I am sponsoring the following Income Statement adjustments:

20   Revenues (MPS and L&P)   S-1.1, S-1.3, S-1.4

21   Uncollectibles/Bad Debts   MPS S-70.2

22   L&P S-69.2

1   Q.   What knowledge, skill, experience, training and education do you have relating

2   to your audit assignments in this case?

3   A.   My college education provided a fundamental knowledge base, which I have

4   utilized in my assigned duties at the Commission. I have attended training courses and

5   reviewed in-house training materials while at the Commission. I have continually received

6   guidance from the Senior Auditors in the Auditing Department on my assignments. I have

7   reviewed the testimony and workpapers from previously filed cases on this issue. I reviewed

8   the Company's testimony, workpapers and Data Request responses for this case and met with

9   Company representatives to discuss this issue. Finally, my previous work assignments at the

10 Commission have provided a knowledge base upon which I rely to develop my assigned areas

11 in this rate proceeding.

12   Q.   Please provide a general outline of your discussion of revenues.

13   A.   A utility's test year revenues, like its expenses, must be annualized and

14 normalized in order to develop a cost of service that is representative of the company's

15 ongoing operations. Since MPS and L&P have two separate tariffs and are two separate

16 divisions of Aquila, the revenues of each division must be reviewed separately and any

17 proposed adjustments to annualized and normalized revenues must be done for each of these

18 entities for purposes of setting rates.

19   Generally, my discussion of revenues will be developed in five parts. My analysis of

20 revenues followed the same approach for both MPS and L&P.   First, I will discuss the

21 general operations of MPS and L&P as they relate to the area of revenues. Second, I will

22 describe the types of adjustments the Staff is proposing in this case. Third, I will discuss

23 some of the specific adjustments and reference the Staff members who assisted in developing

1   the revenue analysis and adjustments. Fourth, I will describe the approach I performed

2   regarding the determination of customer levels for purposes of revenue annualizations.

3   Lastly, I will describe the specific general service adjustments for MPS and L&P by customer

4   class.

5   Q.   Please describe your testimony related to uncollectibles (bad debts).

6   A.   The Staff's approach is to perform an analysis of MPS's and L&P's bad debt

7   expenses over the last five years to determine a normalized level.

8   **REVENUES**

9   Q.   Why has the Staff annualized the revenues of MPS and L&P?

10   A.   To determine the cost of service of a company, all relevant and material

11   components to the revenue requirement must be examined for possible adjustment through the

12   annualization and normalization processes. Just as expense and rate base items have to be

13   included in the rate case at proper levels, revenues also must be reflected to maintain the all

14   important revenue – expense—rate base relationship.

15   Q.   What are annualizations?

16   A.   Annualizations are made to reflect a full 12-month period of revenues and

17   expenses in the development of the proper revenue requirement. Examples of this type of

18   adjustment relate to additions and disconnections of service through the test year and update

19   period. The annualization process is also commonly used to adjust expense levels such as

20   payroll increases and lease payments. Anytime an event occurs that causes revenue and

21   expense levels to go up or down, an annualization is necessary. The events could be a price

22   change for salaries and wages, fuel prices or depreciation levels for new plant additions. New

23   customers taking service from the Company have a partial year of usage and thereby,

1   revenues, must be annualized or revenues would de understated, resulting in an overstatement

2   of the revenue requirement.

3   Q.   What are normalizations?

4   A.   Normalization adjustments are made to ensure that the revenue requirement

5   properly reflects "normal" levels of revenues and expenses. Adjustments are made to remove

6   abnormalities that do not reflect the Company's ongoing operations.   Examples of

7   normalizations adjustments are those adjustments made for "normal" weather for those

8   classes of customers whose utility usage is sensitive to winter and summer temperatures

9   Q.   Please describe MPS and L&P operations.

10   A.   For purposes of recording revenues and levels of customers (numbers),

11   customers are divided into customer classes of residential, commercial, and industrial. To

12   further differentiate between customers, classes are separated based on general consumption

13   habits that are under separate tariffs; e.g., space heating, large and small volume energy

14   consumers and primary and secondary services.

15   Q.   Please describe and discuss the types of adjustments the Staff developed to

16   determine annualized revenues.

17   A.   The Staff's annualized revenues reflect the following adjustments:

18   1)   For normalized weather

19   2)   For customer growth or loss

20   3)   For customer load changes

21   4)   For any price changes resulting from changes in rates

22   **WEATHER NORMALIZATION OF USAGE**

23   Q.   Why is it appropriate to adjust revenues for normalized weather?

1   A.   Temperature levels experienced during any twelve-month period could have a

2   significant impact on the Company's revenues. If the overall temperature were very hot

3   during the summer season or cold during the winter season, the Company's revenue would be

4   overstated in relation to normal weather. Conversely, if the overall temperature were cool

5   during the summer season and mild during the winter season, the Company's revenues would

6   be understated in relation to normal weather. Therefore, the Staff normalized revenues for

7   weather to eliminate the effects of abnormal temperatures during the test year.

8   Q.   Did the Staff apply a weather normalization analysis to both MPS and L&P?

9   A.   Yes.

10   Q.   What methodology did the Staff use to normalize for weather?

11   A.   The methodology used by the Staff to normalize revenues for weather is

12   discussed in the direct testimony of Staff witness Richard J. Campbell of the Energy

13   Department. Based on that analysis, the Staff has proposed to reflect the effect on revenue of

14   normalization due to weather in Adjustment S-1.2 for both MPS and L&P.

15   **CUSTOMER GROWTH/LOSS ANNUALIZATION**

16   Q.   Why is it appropriate to adjust revenues for customer growth or loss?

17   A.   It is appropriate to analyze customer growth and loss in order to reflect the

18   most current ongoing level of revenues in the Staff's overall determination of MPS's and

19   L&P's cost of service.

20   Q.   Did the Staff adjust revenues of both MPS and L&P for customer growth or

21   loss?

22   A.   Yes.

1   Q.   Please explain your analysis related to customer growth/loss for the MPS and

2 L&P customer classes.

3   A.   The Staff analyzed customer growth or decline for each of the rate classes

4 included in the weather normalization analysis of MPS (MO860, MO870, MO710, MO711,

5 MO716, MO720, MO740, MO745, MO800, MO810 and MO811) and L&P

6 (MO910, MO911, MO913, MO914, MO915, MO920, MO921, MO922, MO930, MO931,

7 MO932, MO933, MO934, MO941 and MO940).

8   The customer growth adjustments are comprised of two components. The first

9 component determines the change in customers that has occurred between the 2002 calendar

10 test year months and update period months for this case, September 30, 2003. The second

11 component calculates the weather normalized change in kilowatt-hour (kWh) sales and related

12 revenues related to the change in customers.

13   Q.   Why were the two Small General Service rate codes (MO710 and MO711) for

14 MPS combined in your analysis?

15   A.   These two rate codes represent small commercial customers taking service at

16 secondary voltage. MO710 includes those customers who do not have demand metering

17 equipment installed on its premise; MO711 represents those who do. Despite this distinction,

18 each MO711 customer is billed on both the MO710 and MO711 rates and is charged to the

19 "lesser of" the two amounts. Thus, the relationship between the number of customers, sales

20 and revenues for the two rate codes is valid on a combined basis but each rate code is

21 misleading when examined on its own.

22   In the past few years, Aquila has pursued a policy of installing demand meters

23 on many of the MO710 customers. As a consequence, the current data shows an overly high

1   rate of growth of MO711 customers and a significant decline in MO710 customers. The

2   Staff's methodology for calculating the increase (decrease) in sales and revenues based on the

3   rate of growth in the number of customers will overstate Small General Service revenues, if

4   computed separately.

5   Q.   Please explain how the Staff annualized the level of customers.

6   A.   In order to determine the annualized level of customers, the Staff issued Data

7   Request No. 70 to the Company, requesting for all rate classes customer counts from the

8   Company for each month from January 2001 through September 2003.

9   Q.   How was the growth or loss in kWh sales and revenues calculated?

10   A.   The Staff's revenue annualization consists of two components. First the test

11   year kWh sales for each of the rate classes were adjusted each month for weather to arrive at a

12   normalized kWh level. The normalized kWh sales were then divided by the actual 2002

13   customer count to calculate a normalized kWh usage per customer for each month of the test

14   year. The customer count at the end of the September 30, 2003 update period was then

15   compared to the 2002 test year monthly customer counts. The difference in customer count

16   was then multiplied by the normal use per customer to calculate the growth or loss in kWh

17   sales for each month of the test year. The total test year growth/loss for each rate class was

18   then calculated.

19   Q.   Please describe the second component of the revenue annualization.

20   A.   The second component of the revenue annualization develops revenues in a

21   similar way that annualized kWh sales are calculated. The total test year revenues for each of

22   the rate classes were adjusted for weather to arrive at a normalized revenue level. The total

23   normalized revenue dollars were then divided by the actual customer count to calculate a

1   normalized revenue per customer bill for each month of the test year. The customer count at

2   the end of the September 30, 2003 update period was then compared to the test year monthly

3   customer counts.   The difference in customer count was then multiplied by the normal

4   revenue dollars per customer bill to calculate the growth or loss in revenue dollars for each

5   month of the test year. The total test year revenue growth/loss for each rate class was then

6   calculated.   The methodology for determining weather normalized revenue dollars is

7   discussed in the direct testimony of Staff witnesses Janice M. Pyatte (L&P) and Hong Hu

8   (MPS), both of the Energy Department.

9   Q.   What is the purpose of Adjustment S-1.3?

10   A.   This adjustment increases test period kWh sales and revenues to reflect the

11 customers added to or removed from the MPS residential and small commercial rate

12 schedules through September 30, 2003. Each new customer is assumed to increase test period

13 sales at the average normalized usage per customer from the calendar 2002 test year period.

14   Q.   Why is there no adjustment to reflect the increase in customer growth for the

15 MPS rate code MO811?

16   A.   Rate code MO811 is "frozen."   It has not allowed new customers since

17 June 29, 1993. Although there may be growth in usage for the existing customers, an actual

18 increase in customer numbers is impossible. Therefore, no adjustment was necessary for this

19 rate code.

20 **LARGE CUSTOMER ANNUALIZATION**

21   Q.   Are the test year kWh sales for the large commercial and industrial classes

22 typically adjusted to reflect normal weather?

1   A.   No.   The loads for large commercial and/or industrial customers are not

2   considered weather sensitive and, therefore, no attempt is made to adjust for weather impacts.

3   Q.   How does the Staff typically annualize large volume customer rate classes?

4   A.   The Staff annualizes large volume customer rate classes based on a review of

5   monthly consumption for each customer during the test year and update period.

6   Large customers require detailed study rather than generalized (average usage)

7   adjustment for several reasons. First, when MPS and/or L&P add a new large customer, that

8   customer's usage is not reasonably estimated by simple reference to average usage levels for

9   all other industrial customers. Second, MPS makes available to qualifying new customers

10 the rate benefits of its Economic Development Rider (EDR), which causes average-revenue-

11 per-kWh statistics to be imprecise in predicting ongoing revenue levels for new large

12 customers. Finally, new large customers may have initially erratic load levels until stable

13 patterns of demand are established. Specific analysis of individual large customers is required

14 to deal with these concerns.

15   Q.   Did any other member of the Staff participate in the annualization of large

16 customers?

17   A.   The annualization of kWh sales and rate revenue for the large customers was a

18 collaborative effort between Ms. Pyatte (L&P), Ms. Hu (MPS) and myself.

19   Q.   What is the process used by the Staff in its analysis of large volume

20 customers?

21   A.   The Staff's process is to analyze changes in specific individual customer

22 usage. These changes occur because of new customers coming on to, and existing customers

23 leaving, the electric system. In addition, the Company provides information to the Staff

1   regarding expected changes in customer loads due to expansion projects, downsizing or any

2   other change known to affect a specific customer usage. The Staff annualizes these changes

3   to reflect their impact for a full year.

4   Q.   Please explain Adjustment S-1.4 related to large volume customers.

5   A.   Detailed monthly billing information was requested by the Staff from MPS and

6   L&P (Data Request No. 19 for MPS and No. 10 for L&P) for all large volume customer rate

7   classes since January 2002. Staff Data Request Nos. 3 for MPS and 13 for L&P asked for

8   2003 monthly billing information. MPS and L&P experienced changes in customer loads for

9   several large customers as of September 30, 2003, which is the end of the update period in

10 this case. In addition, consistency with the Staff's September 30, 2003 update for fuel costs,

11 rate base and other test year annualizations requires that customer and sales levels be

12 annualized at the same point in time, at the end of the update period.

13 **ELIMINATION OF UNBILLED REVENUES**

14   Q.   What are unbilled revenues and why is it appropriate to remove the effects of

15 unbilled revenues in a rate case?

16   A.   Unbilled revenues represent accounting estimates booked by the Company at

17 the end of each month to account for the kWh sales to customers through the last day of the

18 month, even though meters are not read on the last day to render actual billings for such sales.

19 The cycle billing process employed by MPS and L&P contributes to a continuous change in

20 the amount of sales that the two divisions have recognized at any given month-end that have

21 not been billed to customers. In the test year, the net change in unbilled kWh sales and

22 related revenue from month-end December 2001 to month-end December 2002 is recorded as

23 calendar 2002 revenue on the books. Elimination of these accrued estimated revenues allows

1   the Staff to analyze test year revenues based upon actual billed data. For example,

2   Mr. Campbell's usage analysis begins with actual billed-basis sales data for the test period.

3   Q.   Was unbilled revenue eliminated in MPS's last rate case, No. ER-01-672?

4   A.   Yes. The adjustment I propose in this case is comparable to that which was

5   proposed by the Staff in the last MPS rate case.

6   Q.   What is the source for the eliminated unbilled revenue amount in the

7   Adjustment S-1.1 which you sponsor?

8   A.   The source for the eliminated unbilled revenues for MPS and L&P is the actual

9   per books amount of calendar 2002 unbilled revenues, as reflected in the Company's general

10 ledger. The Staff's and Company's adjustment for unbilled revenues in this case, are the

11 same.

12 **OTHER REVENUE ACCOUNT ADJUSTMENTS**

13 Q.   Has the Staff reviewed the Other Revenues associated with MPS and L&P?

14 A.   Yes, the Staff has completed a review of the Other Revenues of both MPS

15 and L&P. These revenues include forfeited discounts, rents from property and other

16 revenues. The analysis of the Other Revenues included a review of revenues over the last

17 seven years and through the update period. The test year Other Revenues are representative

18 of an annualized level of revenue for each respective category and, therefore, don't require

19 adjustment.

20 Miscellaneous service revenues will be discussed in the testimony of Staff witness

21 Mack McDuffey of the Energy Department.

1   **UNCOLLECTIBLES (BAD DEBT) EXPENSE**

2   Q.   What is the purpose of Adjustments S-70.2 and S-69.2?

3   A.   Adjustment S-70.2 and Adjustment S-39.2 normalize bad debt expense for the

4   MPS and L&P divisions, respectively.

5   Q.   How was a normal level of bad debt expense for MPS calculated?

6   A.   As stated in the revenue section of my testimony, I have determined an

7   annualized revenue for MPS for the update period ending September 30, 2003. I analyzed the

8   ratio of net bad debt write-offs to booked revenue from 1996-2003. I arrived at a normal level

9   of bad debt expense by multiplying annualized revenue by the average write-off ratio for the

10   years 2000 through 2002, with an update for the nine months ended September 30, 2003.

11   Q.   Why did Staff use a three-year and nine-month average net write-off ratio in its

12   calculation of bad debt expense?

13   A.   An analysis of bad debt write-off ratios at MPS over the most recent

14   seven-years shows that the years prior to 2000 do not represent an ongoing level of bad debt

15   write-offs. Taking a three-year and nine-month average has normalized the fluctuation in the

16   level of bad debt write-offs over the last three years and nine months.

17   Q.   Has the Staff completed an analysis of L&P uncollectibles?

18   A.   Yes. The same analysis used for L&P is consistent with the analysis used for

19   MPS. However, the Staff decided a five-year and nine month average was more appropriate

20   for L&P. An analysis of L&P bad debt write-off ratios over the most recent five-years shows

21   that 2000 and 2002 did not fit the norm. 2000 bad debt write-offs were lower and 2002 bad

22   debt write-offs were higher in relationship to the most recent five-year and nine month bad

1   debt write-offs. Taking a five-year and nine-month average has normalized the fluctuation in

2   the level of bad debt write-offs.

3   Q.   Does this conclude your direct testimony?

4   A.   Yes, it does.

Amanda C. McMellen

COMPANY	CASE NO.	ISSUES
Osage Water Company	SR-2000-556	Plant in Service Depreciation Reserve Depreciation Expense Operation & Maintenance Expense
	WR-2000-557	Plant in Service Depreciation Reserve Depreciation Expense Operation & Maintenance Expense
Empire District Electric Company	ER-2001-299	Plant in Service Depreciation Reserve Depreciation Expense Cash Working Capital Other Working Capital Rate Case Expense PSC Assessment Advertising Dues, Donations & Contributions
UtiliCorp United, Inc./ d/b/a Missouri Public Service	ER-2001-672	Insurance Injuries and Damages Property Taxes Lobbying Outside Services Maintenance SJLP Related Expenses
BPS Telephone Company	TC-2002-1076	Accounting Schedules Separation Factors Plant in Service Depreciation Reserve Revenues Payroll Payroll Related Benefits Other Expenses

Schedule 1-1