Exhibit No .:

Issues:

Witness:

Sponsoring Party:

Revenues; Weather Normalization of Usage; Customer Growth/Loss Annualization; Large Customer Annualization; Elimination of Unbilled Revenues; Elimination of Interim Energy Charge Revenues; Elimination of Steam Revenues; Elimination of Interim Energy Charge Refunds; Other Revenue Account Adjustments; Uncollectibles (Bad Debt) Expense; Maintenance Expense; and Turbine Overhaul Maintenance Amanda C. McMellen MoPSC Staff Type of Exhibit: Direct Testimony Case No.: ER-2007-0004 Date Testimony Prepared: January 18, 2007

## MISSOURI PUBLIC SERVICE COMMISSION

## UTILITY SERVICES DIVISION

MAY 2 2007 Missouri Public Service Commission

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Exhibit No.

Case No(s

Date

## **DIRECT TESTIMONY**

OF

### **AMANDA C. McMELLEN**

## AQUILA, INC. d/b/a AQUILA NETWORKS-MPS - ELECTRIC and AQUILA NETWORKS - L&P - ELECTRIC

### **CASE NO. ER-2007-0004**

Jefferson City, Missouri January 2007

#### **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. )

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Case No. ER-2007-0004

#### AFFIDAVIT OF AMANDA C. McMELLEN

STATE OF MISSOURI ) SS. COUNTY OF COLE )

> D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri County of Cole

Commission Exp. 07/01/2008

Amanda C. McMellen, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 19 pages to be presented in the above case; that the answers in the foregoing 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.

C'Mcmille

Amanda C. McMellen

Subscribed and sworn to before me this 17 k day of ( January 200 sullankin 2007.

Notary Public/

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3	AMANDA C. McMELLEN
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5	d/b/a AQUILA NETWORKS-MPS (Electric)
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1		DIRECT TESTIMONY	
2	OF		
3	AMANDA C. McMELLEN		
4		AQUILA, INC.	
5		d/b/a AQUILA NETWORKS-MPS (Electric)	
6		and AQUILA NETWORKS-L&P (Electric)	
7		CASE NO. ER-2007-0004	
8	Q.	Please state your name and business address.	
9	А.	Amanda C. McMellen, 200 Madison Street, Suite 440, Jefferson City, MO	
10	65102.		
11	Q.	By whom are you employed and in what capacity?	
12	А.	I am a Utility Regulatory Auditor for the Missouri Public Service Commission	
13	(Commission	ı).	
14	Q.	Please describe your educational and employment background.	
15	Α.	I graduated from DeVry Institute of Technology in June 1998 with a Bachelors	
16	of Science de	egree in Accounting. Before coming to work at the Commission, I worked as an	
17	accounts rec	eivable clerk. I commenced employment with the Commission Staff (Staff) in	
18	June 1999.		
19	Q.	What has been the nature of your duties while employed by the Commission?	
20	<b>A</b> .	I am responsible for assisting in the audits and examinations of the books and	
21	records of uti	lity companies operating within the state of Missouri.	
22	Q.	Have you previously filed testimony before this Commission?	

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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.	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	Α.	Yes, in conjunction with other members of the Staff.		
7	Q.	Q. Please describe your areas of responsibility in this case, Case No.		
8	ER-2007-0004.			
9	Α.	I am responsible for the areas of	electric revenue, uncollectibles (bad debts)	
10	expense, maintenance expense and turbine overhaul maintenance expense for both MPS and			
11	L&P.			
12	Q.	Q. Please describe what adjustments you are sponsoring in this case.		
13	А.	I am sponsoring the following Inc	ome Statement adjustments:	
14 15		Revenues	MPS S-1.1, S-1.2, S-1.7, S-1.8 L&P S-1.1, S-1.2, S-1.7, S-1.8, S-4.1, S-8.1	
16 17		Uncollectibles/Bad Debts	MPS S-70.2 L&P S-68.2	
18 19 20 21 22 23 24 25 26 27		Maintenance Expense	<ul> <li>MPS S-16.4, S-17.2, S-18.2, S-19.3, S-20.2, S-26.2, S-27.2, S-28.3, S-28.4, S-29.1, S-42.2, S-43.1, S-44.2, S-45.2, S-47.2, S-59.1, S-60.2, S-61.2, S-62.2, S-63.2, S-64.2, S-65.2, S-66.2</li> <li>L&amp;P S-17.2, S-18.2, S-19.2, S-20.2, S-21.2, S-26.2, S-27.2, S-28.2, S-42.1, S-43.2, S-44.2, S-45.2, S-57.1, S-58.2, S-59.2, S-60.2, S-61.2, S-62.2, S-63.2, S-64.2</li> </ul>	
28 29 30		Turbine Overhaul Maintenance	MPS S-19.2, S-28.2 L&P S-20.3, S-27.3	

Q. What knowledge, skill, experience, training and education do you have related
 to your audit assignments in this case?

3 Α. 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. I have been 9 assigned to previous Aquila cases, specifically Case Nos. ER-2001-672, ER-2004-0034 and 10 ER-2005-0436. In the last three Aquila rate cases I, along with other Staff members, was responsible for sponsoring proposed revenue adjustments similar to my assignment in this 11 case. I have also been involved in the area of revenues in other rate cases. Finally, my 12 13 previous work assignments at the Commission have provided a knowledge base upon which I 14 relied to develop my assigned areas in this rate proceeding.

15

### **EXECUTIVE SUMMARY OF TESTIMONY**

16

Q. Please provide a brief summary of your testimony.

A. My testimony covers the areas of revenues and uncollectibles. I reviewed the
Company's revenues and developed adjustments to annualize revenues for Aquila's MPS and
L&P division operations separately. I developed adjustments to reflect revenue growth of
MPS and L&P related to additional customers connecting to each of Aquila's electric
operating divisions. I normalized the level of uncollectibles and maintenance expenses using
actual results experienced by MPS and L&P divisions.

23

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

A. A utility's test year revenues, like its expenses, must be annualized and normalized in order to develop a cost of service that is representative of the company's ongoing operations. As long as MPS and L&P have two separate sets of rate schedules with different rates, the revenues of each division must be reviewed separately and any proposed adjustments to annualize and normalize revenues must be calculated separately for each of these entities for purposes of setting rates.

7 Generally, my discussion of revenues will be developed in five parts. My analysis of 8 revenues followed the same approach for both MPS and L&P. First, I will discuss the general 9 operations of MPS and L&P as they relate to the area of revenues. Second, I will describe the 10 types of adjustments the Staff is proposing in this case. Third, I will discuss some of the 11 specific adjustments and reference the Staff members who assisted in developing the revenue 12 analysis and adjustments. Fourth, I will describe the approach I performed regarding the 13 determination of customer levels for purposes of revenue annualizations. Lastly, I will 14 describe the specific general service adjustments for MPS and L&P by customer class.

15

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

A. I analyzed MPS's and L&P's bad debt expenses over the last five years to
determine a normalized level.

18

Q. Please provide a summary of your testimony on maintenance expenses.

A. Maintenance expense was normalized by analyzing actual expenses over the
 previous five years. In an effort to remove the volatility of fluctuating levels of yearly
 maintenance expense, MPS and L&P were evaluated separately. The levels of maintenance
 expense included in this case most accurately reflect the expense that will occur on an

ongoing basis. Turbine overhaul maintenance was normalized by comparing the accrual for
 each turbine to its actual overhaul maintenance costs.

#### 3 <u>REVENUES</u>

Q.

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Why did the Staff annualize the revenues of MPS and L&P?

A. The Staff annualizes revenues to determine a company's cost of service. All relevant and material components to the revenue requirement must be examined for possible adjustment through the annualization and normalization processes. Just as expense and rate base items have to be included in the rate case at proper levels, an annual level of revenues must be calculated to maintain the all important revenue – expense—rate base relationship.

10

What are annualizations?

Annualizations are made to reflect a full 12-month period of revenues and 11 Α. 12 expenses in the development of the proper revenue requirement. Examples of this type of 13 adjustment relate to additions and disconnections of service through the test year and update 14 period. The annualization process is also commonly used to adjust expense levels such as 15 payroll increases and lease payments. Anytime an event occurs during the test year or update 16 period that causes revenue and expense levels to go up or down, an annualization is necessary. 17 The event could be a price change for salaries and wages, a change in fuel prices or a change 18 in depreciation levels for new plant additions. One very common adjustment that is made to 19 revenues is if a customer terminates service and disconnects from the system. This requires 20 the removal of any revenues relating to that customer so revenues will not be overstated. If 21 new customers taking service from the Company have only a partial year of usage reflected in 22 the test year, revenues must be annualized to reflect a full year's revenue for the customer.

The Staff's revenue requirement recommendation would be overstated if revenues don't
 reflect a full twelve month level of current customer usage.

3

Q. What are normalizations?

Normalization adjustments are made to ensure that the revenue requirement 4 Α. properly reflects "normal" levels of revenues and expenses. Adjustments are made to remove 5 abnormalities that do not reflect the Company's ongoing operations. 6 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 Another example of normalization adjustments is when revenues or usage is high or low as a 10 result of unusual events, such as outages or down-turns in the economy. Maintenance expense may be unusually high because a power plant may be out of service for an unusually 11 12 long period of time requiring a normalization of maintenance costs to reflect an appropriate 13 level of costs in the case.

14

Q. Please describe MPS and L&P operations.

A. For purposes of recording revenues and levels of customers (numbers), customers are divided into three basic customer classes of residential, commercial, and industrial. To further differentiate between customers, these three classes are separated based on general consumption habits that are under separate tariffs; e.g., space heating, large and small volume energy consumers and primary and secondary services.

20 Q. Please describe and discuss the types of adjustments the Staff developed to
21 determine annualized revenues.

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

1	1) For normalized weather			
2	2) For customer growth or loss			
3	3) For customer load changes			
4	4) For any price changes resulting from changes in rates			
5	WEATHER NORMALIZATION OF USAGE			
6	Q. Why is it appropriate to adjust revenues for normalized weather?			
7	A. Temperature levels experienced during any twelve-month period may have a	a		
8	significant impact on the Company's revenues. If the overall temperature was very hot during			
9	the summer season or cold during the winter season of the test year, the Company's revenue			
10	would be overstated in relation to "normal" weather. Conversely, if the overall temperature			
11	was cool during the summer season and mild during the winter season of the test year, the			
12	Company's revenues would be understated in relation to "normal" weather. Therefore, the			
13	Staff normalized revenues for weather to eliminate the effects of abnormal temperatures			
14	during the test year.			
15	Q. Did the Staff apply a weather normalization analysis to both MPS and L&P?			
16	A. Yes.			
17	Q. What methodology did the Staff use to normalize for weather?			
18	A. Staff witnesses Shawn E. Lange and Curt Wells of the Energy Department	ıt		

discuss in their direct testimony the Staff's proposed adjustment for weather normalization for
both MPS and L&P.

## 21 CUSTOMER GROWTH/LOSS ANNUALIZATION

22

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

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1	A. Customer growth or loss impacts the company's revenues. It is appropriate to
2	adjust for customer growth or loss in order to reflect the most current ongoing level of
3	revenues in the Staff's overall determination of MPS's and L&P's cost of service.
4	Q. Did the Staff adjust revenues of both MPS and L&P for customer growth or
5	loss?
6	A. Yes. The Staff analyzed customer growth or loss for each of the rate classes
7	included in the weather normalization analysis of MPS for residential rate codes MO860 and
8	MO870; for small general service rate codes MO710, MO711, MO740, MO800, MO810 and
9	MO811 (combined); and for large general service rate code MO720. For L&P, customer
10	growth or loss was computed for residential rate codes MO910, MO911, MO913 & MO914
11	(combined) and MO920 & MO921 (combined); for small general service rate codes MO930,
12	MO932 & MO934 (combined), MO931 & MO933 (combined); and for large general service
13	rate code MO940.
14	Q. Please explain your analysis related to customer growth/loss for the MPS and
15	L&P customer classes.
16	A. The customer growth adjustments are comprised of two components. First, the
17	Staff determines the change in the number of customers that occurred between the 2005
18	calendar test year months and update period months for this case, which end September 30,
19	2006. The second component calculates the weather normalized change in kilowatt-hour
20	(kWh) sales and related revenues and adjusts for the change in customer levels.
21	Q. Why were the two Small General Service rate codes (MO710 and MO711) for
22	MPS combined in your analysis?

A. These two rate codes represent small commercial customers taking service at secondary voltage. MO710 includes those customers who do not have demand metering equipment installed on its premise; while MO711 represents those who do. Despite this distinction, each MO711 customer is billed on both the MO710 and MO711 rates and is charged to the "lesser of" the two amounts. Thus, the relationship between the number of customers, sales and revenues for the two rate codes is valid on a combined basis but each rate code is misleading when examined independently.

8 In the past few years, Aquila has pursued a policy of installing demand meters on 9 many of the MO710 customers. As a consequence, the current data shows an overly high rate 10 of growth of MO711 customers and a decline in MO710 customers. The Staff's methodology 11 for calculating the increase (decrease) in sales and revenues based on the rate of growth in the 12 number of customers will overstate Small General Service revenues, if computed separately, 13 Because of the potential for overstatement of revenues in these two rate classes, the Staff has 14 combined them for annualization purposes. The Company has also combined these two rate 15 classes when calculating annualized revenues.

16

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

A. In order to determine the annualized level of customers, the Staff issued Data
Request Nos. 27 (MPS) and 29 (L&P) to the Company, requesting for all rate classes
customer counts from the Company for each month through September 2006.

20

Q. How did the Staff calculate the growth or loss in kWh sales and revenues?

A. The Staff's revenue annualization consists of two components. First, the test
year kWh sales for each of the rate classes were adjusted each month for weather to arrive at a
normalized kWh level. The normalized kWh sales were then divided by the actual 2005

**O**.

1 customer count to calculate a normalized kWh usage per customer for each month of the test 2 year ending December 31, 2005. The customer count at the end of the September 30, 2006 3 update period was then compared to the 2005 test year monthly customer counts. The 4 difference in customer count was then multiplied by the normal use per customer to calculate 5 the growth or loss in kWh sales for each month of the test year. The total test year kWh 6 growth/loss for each rate class was then calculated.

7

Please describe the second component of the revenue annualization.

The second component of the revenue annualization adjusts the total test year Α. 8 revenues for each of the rate classes for weather to arrive at a normalized revenue level. The 9 total normalized revenue dollars were then divided by the actual customer count to calculate a 10normalized revenue per customer bill amount for each month of the test year. The customer 11 count at the end of the September 30, 2006 update period was then compared to the test year 12 monthly customer counts. The difference in customer count was then multiplied by the 13 normal revenue dollars per customer bill to calculate the growth or loss in revenue dollars for 14 each month of the test year. The total test year revenue growth/loss for each rate class was 15 then calculated. The methodology for determining weather normalized revenue dollars is 16 discussed in the direct testimony of Staff witnesses Lange and Wells. 17

18

Q. What is the purpose of Adjustment S-1.8 (MPS and L&P)?

A. This adjustment increases test period kWh sales and revenues to reflect the
customers added to or removed from the MPS and L&P residential and small commercial rate
schedules through September 30, 2006. Each new customer is assumed to increase test period
sales at the average normalized usage per customer value from the calendar 2005 test year
period.

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## LARGE CUSTOMER ANNUALIZATION

Q. Are the test year kWh sales for the large commercial and industrial classes typically adjusted to reflect normal weather?

4 A. No. The loads for large commercial and/or industrial customers are not 5 considered weather sensitive and, therefore, no attempt is made to adjust for weather impacts.

6

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

A. The Staff annualizes large volume customer rate classes based on a review of
monthly consumption for each customer during the test year and update period.

9 Large customers require detailed study rather than generalized (average usage) 10 adjustment for several reasons. First, when MPS and/or L&P add a new large customer, that 11 customer's usage is not reasonably estimated by simple reference to average usage levels for 12 all other industrial customers. Second, MPS makes available to qualifying new customers 13 the rate benefits of its Economic Development Rider (EDR), which causes average-revenue-14 per-kWh statistics to be imprecise in predicting ongoing revenue levels for new large 15 customers. Finally, new large customers may initially have erratic load levels until stable 16 patterns of demand are established. Specific analysis of individual large customers is required 17 to deal with these concerns.

18

Q. What process does the Staff use in its analysis of large volume customers?

A. The Staff's process is to analyze changes in specific individual customer
usage. These changes occur because of new customers coming on to, and existing customers
leaving, the electric system. In addition, the Company provides information to the Staff
regarding expected changes in customer loads due to expansion projects, downsizing or any
other change known to affect a specific customer's usage. The Staff also examines other

sources of customer growth for large customers, such as annual reports, Securities and
 Exchange Commission filings, business plans, budgets and news media (newspaper articles
 and other news outlets). The Staff annualizes these changes to reflect their impact for a full
 year.

Q. Please explain Adjustment S-1.7 related to large volume customers for MPS
and L&P.

A. Detailed monthly billing information was requested by the Staff from MPS and
L&P (Data Request No. 28 for MPS and No. 30 for L&P) for all large volume customer rate
classes through September 30, 2006. MPS and L&P experienced changes in customer loads
for several large customers as of September 30, 2006, which is the end of the update period in
this case. In addition, consistency with the Staff's September 30, 2006 update for fuel costs,
rate base and other test year annualizations requires that customer and sales levels be
annualized at the same point in time, at the end of the update period.

#### 14

### **ELIMINATION OF UNBILLED REVENUES**

Q. What are unbilled revenues and why is it appropriate to remove the effects of
unbilled revenues in a rate case?

A. Unbilled revenues represent accounting estimates booked by the Company at the end of each month to account for the kWh sales to customers through the last day of the month, even though meters are not read on the last day to render actual billings for such sales. The cycle billing process employed by MPS and L&P contributes to a continuous change in the amount of sales that the two divisions have recognized at any given month-end that have not been billed to customers. In the test year, the net change in unbilled kWh sales and related revenue from month-end December 2004 to month-end December 2005 is recorded as

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1	calendar 2005 revenue on the books. Elimination of these accrued estimated revenues allows
2	the Staff to analyze test year revenues based upon actual billed data.
3	Q. Was unbilled revenue eliminated in MPS's and L&P's last rate case, No.
4	ER-2005-0436?
5	A. Yes. The adjustments I propose in this case are comparable to what the Staff
6	proposed in the last MPS and L&P rate cases.
7	Q. What is the source for the eliminated unbilled revenue amount in the
8	Adjustment S-1.1 (MPS and L&P) that you sponsor?
9	A. The source for the eliminated unbilled revenues for MPS and L&P is the actual
10	per books amount of calendar year 2005 unbilled revenues, as reflected in the Company's
11	general ledger. The Staff's and Company's adjustment for unbilled revenues in this case, are
12	the same.
13	ELIMINATION OF INTERIM ENERGY CHARGE REVENUES
14	Q. What is the Interim Energy Charge (IEC) and why is it appropriate to remove
15	the effects of IEC revenues in a rate case?
16	A. The IEC was a mechanism intended to address fuel cost volatility in Aquila's
17	2004 rate case, Case No. ER-2004-0034. The IEC was terminated in the last rate case, Case
18	No. ER-2005-0436. Therefore, the IEC revenues reflected in the 2005 test year should be
19	eliminated because they are not an ongoing revenue source for the MPS and L&P electric
20	operations.
21	Q. What is the source for the eliminated IEC revenue amounts in Adjustment
22	S-1.2 (MPS and L&P) that you sponsor?

A. The source for the eliminated IEC revenues for MPS and L&P is the actual per books amount of calendar year 2005 IEC revenues, as reflected in the Company's general ledger. The Staff's and Company's adjustment for IEC revenues in this case are the same.

### 4 ELIMINATION OF STEAM REVENUES

5 Q. Why is it appropriate to remove steam revenues from L&P's books in this rate 6 case?

A. L&P is not seeking a change in its steam heating rates in this case. The
amount for steam revenues is included within total electric revenues on L&P's books for
reporting purposes only. Therefore, the steam revenues reflected in the 2005 test year should
be eliminated because they are not a revenue source for the L&P electric operations.

Q. What is the source for the eliminated steam revenue amounts in Adjustment
S-8.1 (L&P) which you sponsor?

A. The source for the eliminated steam revenues for L&P is the actual per books
amount of calendar year 2005 steam revenues, as reflected in the Company's general ledger.

15

## **ELIMINATION OF IEC REFUND**

Q. Why is it appropriate to remove the IEC refund included in revenues from
L&P's books in this rate case?

A. The IEC refund provided to L&P customers was a one time credit in
connection with the Stipulation and Agreement in Case No. ER-2005-0436. Therefore, the
IEC refund reflected in the 2005 test year should be eliminated because it is not an ongoing
refund for L&P electric customers.

- Q. What is the source for the eliminated IEC refund amounts in Adjustment S-4.1
   (L&P) which you sponsor?
- A. The source for the eliminated IEC refund for L&P is the actual per books
  amount of calendar year 2005, as reflected in the Company's general ledger.
- 5

## OTHER REVENUE ACCOUNT ADJUSTMENTS

Q. Has the Staff reviewed the amounts booked in the Other Revenues accounts
7 associated with MPS and L&P?

A. Yes, the Staff has completed a review of the amounts booked in the Other
Revenues accounts of both MPS and L&P. These revenues include forfeited discounts, rents
from property and other revenues. The analysis of the Other Revenues included a review of
revenues over the last ten years and through the end of the update period. The test year Other
Revenues amounts are representative of an annualized level of revenue for each respective
category and, therefore, don't require adjustment.

14

## UNCOLLECTIBLES (BAD DEBT) EXPENSE

15

Q. What is the purpose of Adjustments S-70.2 and S-68.2?

A. Adjustment S-70.2 and Adjustment S-68.2 normalize bad debt expense for the
MPS and L&P divisions, respectively.

18

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

A. As stated in the revenue section of my testimony, I have determined annualized
revenues for MPS for the update period ending September 30, 2006. I analyzed the ratio of
net bad debt write-offs to booked revenue from 1993-2006. I arrived at a normal level of bad
debt expense by multiplying annualized revenue by a three-year average write-off ratio for the

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1	years October 2003 through September 2006. The three-year average was developed using		
2	the weighting of the actual bad debts write-offs to revenues over the same three-year period.		
3	The use of the actual write-offs of a given month to the corresponding month of revenues, in		
4	effect, "weights" each month's write-offs with the revenues.		
5	Q. Why did Staff use a three-year weighted average net write-off ratio in its		
6	calculation of bad debt expense?		
7	A. The Staff used the three-year weighted average for bad debts to update this		
8	item for the most current information available. Taking an updated three-year weighted		
9	average has normalized the fluctuation in the level of bad debt write-offs over the last three		
10	years.		
11	Q. How was a normal level of bad debt expense calculated for L&P?		
12	A. The analysis used for L&P is consistent with the analysis used for MPS. A		
13	three-year weighted average was used to normalize the fluctuation in the level of bad debt		
14	write-offs.		
15	MAINTENANCE EXPENSE		
16	Q. Please explain adjustments S-16.4, S-17.2, S-18.2, S-19.3, S-20.2, S-26.2,		
17	S-27.2, S-28.3, S-28.4, S-29.1, S-42.2, S-43.1, S-44.2, S-45.2, S-47.2, S-59.1, S-60.2, S-61.2,		
18	S-62.2, S-63.2, S-64.2, S-65.2 and S-66.2 for MPS and S-17.2, S-18.2, S-19.2, S-20.2, S-21.2,		
19	S-26.2, S-27.2, S-28.2, S-42.1, S-43.2, S-44.2, S-45.2, S-57.1, S-58.2, S-59.2, S-60.2, S-61.2,		
20	S-62.2, S-63.2 and S-64.2 for L&P.		
21	A. The adjustments normalize non-payroll and maintenance expense for		
22	production (FERC Uniform System of Accounts (USOA) 510-514 and 551-554),		

transmission (Accounts 568-573) and distribution (Accounts 590-598) plant, respectively,
 during the test year.

Q. How did the Staff determine normalized maintenance expense for the test year
ended December 31, 2005?

5 Α. Staff obtained information for the period January 1999 to September 2006 for 6 both MPS and L&P to study the maintenance costs experienced by Aquila at its two Missouri 7 divisions. Analysis was performed on the maintenance accounts and by individual power 8 plant production facilities to determine the proper level of maintenance costs in this case. After removing turbine overhaul accrual costs for production maintenance, and Company 9 10 payroll costs for production, transmission, and distribution maintenance, a 69-month average, using calendar years 2001 through 2005 information updated through September 2006, was 11 calculated for non-payroll production, transmission, and distribution accounts for L&P. After 12 removing turbine accrual costs for MPS's production maintenance, a 45-month average, using 13 14 calendar years 2003 through 2005 information updated through September 2006, was 15 calculated for non-payroll production, transmission, and distribution maintenance accounts for 16 MPS's electric operations. The adjustments restate the test year 2005 results to reflect the 17 average costs described above.

18 Q. Why was a 45 month average used for MPS while a 69 month average was
19 used for L&P?

A. I observed the trends in the fluctuations of balances for each applicable maintenance account. To best smooth the volatility in the yearly balances, a 45 month average was used for MPS and a 69 month average was used for L&P.

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1	Q.	Why was payroll removed prior to calculating the average of maintenance	
2	expense?		
3	А.	Payroll is annualized separately in the ratemaking process. Therefore, any	
4	payroll costs	recorded in the maintenance accounts must be removed to avoid double counting	
5	of such payr	coll costs. Staff witness Dana E. Eaves will be sponsoring the Staff's payroll	
6	adjustments	in this case.	
7	Q.	Why was the turbine overhaul accruals removed from the non-payroll	
8	production 1	maintenance analysis prior to calculating the normalized level of production	
9	maintenance	?	
10	А.	The normalized level of turbine overhaul maintenance has been calculated	
11	separately be	ecause major overhauls on the large coal units, for example, only occur every six	
12	or seven years.		
13	TURBINE	OVERHAUL MAINTENANCE	
14	Q.	Please explain adjustments S-20.3 and S-27.3 for L&P and S-19.2, S-28.2 for	
15	MPS.		
16	А.	These adjustments are made to normalize the turbine overhaul accrual.	
17	Q.	What is the purpose of the accrual for major turbine overhaul maintenance?	
18	А.	Major turbine overhauls occur every six or seven years for the large coal units.	
19	The accrual	spreads the cost on the income statement over the six or seven year time frame.	
20	Q.	How was the turbine overhaul maintenance adjustment calculated?	
	A.	The actual costs for major turbine overhauls were provided for each of the	
21	1		
21 22		&P generating units. The frequency for a major turbine overhaul for the base-load	
		&P generating units. The frequency for a major turbine overhaul for the base-load	

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coal units is six to seven years. The historical costs for the turbine overhauls were divided by
 six or seven years to determine the annual cost to be recovered in rates.

The MPS peaking units incur three types of major maintenance, each of which has a different time interval. Due to the lack of actual historical maintenance costs, for all three types of major maintenance, the annual level of maintenance expense was determined differently than the method used for base load coal units. The historical costs for major maintenance on each of these units were provided for the period from May 1999 through September 2006. An average cost per year was developed based upon this data. The 2005 test year was adjusted to reflect the average annual cost for these units.

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Q. Does this conclude your direct testimony?

- 11
- A. Yes, it does.

## SUMMARY OF RATE CASE TESTIMONY FILED

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## Amanda C. McMellen

<u>COMPANY</u>	<u>CASE NO.</u>	<u>ISSUES</u>
Osage Water Company	SR-2000-556	Plant in Service Depreciation Reserve Depreciation Expense Operation & Maintenance Expense
Osage Water Company	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

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## Amanda C. McMellen

COMPANY Aquila, Inc. d/b/a	<u>CASE NO.</u>	<u>ISSUES</u>
Aquila Networks-MPS & Aquila Networks-L&P	ER-2004-0034	Revenue Annualizations Uncollectibles
Fidelity Telephone Company	IR-2004-0272	Revenue Revenue Related Expenses
Aquila, Inc. d/b/a Aquila Networks-MPS &		
Aquila Networks-L&P	ER-2005-0436	Revenue Annualizations Uncollectibles
Empire District Electric Company	ER-2006-0315	Payroll Payroll Taxes 401(k) Plan Health Care Costs Incentive Compensation Depreciation Expense Amortization Expense Customer Demand Program Deferred State Income Taxes Income Taxes