Exhibit No.:	
Issues:	Weather Rate Revenue
Witness:	Curt Wells
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Direct Testimony
Case No.:	ER-2007-0004
Date Testimony Prepared:	January 18, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

DIRECT TESTIMONY

OF

CURT WELLS

AQUILA, INC.
d/b/a AQUILA NETWORKS-MPS
AND AQUILA NETWORKS-L&P

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 areas.	))))))	Case No. ER-2007-0004

AFFIDAVIT OF CURT WELLS

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Curt Wells, of lawful age, on his oath states: that he has participated in the preparation of the following Direct Testimony in question and answer form, consisting of 13 pages of Direct Testimony to be presented in the above case, that the answers in the following Direct Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

Curt Wells

Subscribed and sworn to before me this 17th day of January, 2007.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086

Susan L Sundermeyer
Notary Public

My commission expires 9-21-10

Table of Contents

DIRECT TESTIMONY

OF

CURT WELLS

AQUILA, INC.
d/b/a AQUILA NETWORKS-MPS
AND AQUILA NETWORKS-L&P

CASE NO. ER-2007-0004

EXECUTIVE SUMMARY 2

WEATHER DATA 3

STAFF WEATHER DATA ADJUSTMENTS 5

ADJUSTMENTS TO KWH SALES AND RATE REVENUE 7

WEATHER NORMALIZATION OF REVENUES 10

DAYS ADJUSTMENTS TO RATE REVENUE 11

EFFECT OF THE RATE CHANGE ON REVENUES 12

ADJUSTMENTS TO RATE REVENUE DUE TO RATE SWITCHING 12

DIRECT TESTIMONY

OF

CURT WELLS

AQUILA, INC.
d/b/a AQUILA NETWORKS-MPS
AND AQUILA NETWORKS-L&P

CASE NO. ER-2007-0004

Q. Please state your name and business address.

A. My name is Curt Wells and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri, 65102.

Q. What is your present position with the Missouri Public Service Commission (Commission)?

A. I am a Regulatory Economist in the Energy Department of the Utility Operations Division.

Q. Please review your educational background and work experience.

A. I have a Bachelor's degree in Economics from Duke University, a Master's degree in Economics from The Pennsylvania State University, and a Master's degree in Applied Economics from Southern Methodist University. I have been employed by the Missouri Public Service Commission since February, 2006. Prior to joining the Commission, I completed a career in the U.S. Air Force, which included assignments as a navigator in weather reconnaissance aircraft, and later in the Purchasing/Contracting area as Contract Negotiator and Administrator, Contracting Policy Manager, Installation Purchasing Department Chief, and Contracting Program Manager.

Q. Have you filed testimony in prior cases?

A. Yes. My previous testimony is listed in Schedule CW-1.

EXECUTIVE SUMMARY

Q. Please summarize your testimony.

A. In my testimony I address two separate issues. First, I address the development of the weather data used in this case by explaining (a) what data was used by the Staff to derive normal (average) temperatures for the Kansas City area for this rate case, (b) what temperature data was available, (c) why the available temperatures needed to be adjusted, and (d) how those adjustments were made. I provided this weather data to Staff witness Mr. Shawn E. Lange, who performed the weather normalization of sales.

Second, I address the current level of annual retail sales of electricity (kWh sales) and the revenue from those sales (rate revenue) for the electric operations of Aquila, Inc. d/b/a Aquila Networks-MPS (MPS) and Aquila Networks-L&P (L&P), collectively referred to as Aquila, based upon a test year of January 1, 2005 – December 31, 2005, updated for known and measurable changes through September 30, 2006.

Q. Which specific adjustments to Staff Accounting Schedule 10 - Adjustments to Income Statement are you sponsoring?

A. For the MPS division, I am sponsoring the following adjustments to revenues:

- S-1.3 (billing corrections),
- S-1.4 (March 1, 2006 rate change),
- S-1.5 (weather normalization), and
- S-1.6 (days adjustment).

For the L&P Division, I am sponsoring the following adjustments:

- S-1.3 (billing corrections),

- S-1.4 (March 1, 2006 rate change),
- S-1.5 (weather normalization), and
- S-1.6 (days adjustment).

With the exception of the annualization for the rate change, these revenue adjustments are based on an underlying change in kWh sales.

Q. What is your recommendation to the Commission regarding the appropriate level of kWh sales and rate revenue for MPS and L&P?

A. I recommend that the Commission adopt the Staff's adjustments to test year rate revenue and kWh sales for MPS that are shown on the attached Schedule CW-3 and Schedule CW-4, respectively, and the Staff's adjustments to test year rate revenue and kWh sales for L&P that are shown on the attached Schedule CW-5 and Schedule CW-6, respectively. If adopted, Staff's kWh sales will be used as an input into the calculation of Missouri fuel and purchased power expense. Also, if adopted, Staff's Missouri rate revenue and kWh sales by rate class will be used to compute and implement any Commission-ordered revenue changes in this case.

WEATHER DATA

Q. What weather data did the Staff use in this case?

A. Because the weather-related demand for electricity is driven primarily by temperature, the Staff used the "actual" daily maximum and minimum temperatures for the test year at the Kansas City weather station located at Kansas City International Airport. To determine normals for NOAA's most recent 30-year normals period (1971-2000), I used maximum and minimum temperatures for the period of the existence of the Kansas City International Airport station (November 1, 1972- December 31, 2000), supplemented with the

average of three nearby stations (Kansas City Downtown, Lexington, and St Joseph) for the period January 1, 1971-October 31, 1972. In his direct testimony, Mr. Lange will explain how he utilized this data for this case.

Q. What are "normal" temperatures?

A. As stated by the National Oceanic and Atmospheric Administration (NOAA) in its publication, Climatography of the United States No. 81, Monthly Station Normals of Temperature, Precipitation, and Heating and Cooling Degree Days, 1971-2000, Missouri, "A climate normal is defined, by convention, as the arithmetic mean of a climatological element computed over three consecutive decades (WMO, 1989)." NOAA applies this concept to temperature by calculating thirty-year temperature normals for the most recent three consecutive decades as monthly average maximum temperature and monthly average minimum temperature, using the Fahrenheit scale. The three most recent consecutive decades are currently the thirty years ending December 31, 2000.

International convention among members of the World Meteorological Organization (WMO), and its predecessor, the International Meteorological Committee, have established that three-decade periods are appropriately long and uniform periods for the calculation of normals. NOAA recalculates thirty-year normals at the end of each decade as a way of dealing with changes in measurement conditions and changes in the climate itself.

Q. Why did you use temperatures at the Kansas City weather station?

A. The temperatures at the Kansas City National Weather Service (NWS) weather station best represent the weather in Aquila's service territory in Missouri, and the Kansas City weather station is a "first order (Principal Climatological)" weather station staffed by professional observers.

Q. Is the Staff's weather data consistent with Aquila's weather data?

A. Aquila witness Robert D. Adkins also used weather data from the same weather station (Adkins direct, page 5, lines 10 and 11) and for the same time period used by Staff. (Adkins direct, page 5, line 12).

STAFF WEATHER DATA ADJUSTMENTS

Q. What temperature data is available from the Kansas City area weather stations?

A. Actual (unadjusted) maximum and minimum daily temperatures for the 30-year normals period (1971-2000) are available from NOAA internet sources such as the Midwest Climate Information Service and the National Climatic Data Center. NOAA also provides adjusted maximum and minimum monthly temperatures for this time period, in a file known as the NOAA Sequentials, in which NOAA has made adjustments to the monthly averages to account for missing data, significant discontinuities with surrounding stations, time of observation, etc. The NOAA Sequential data set consists of adjusted monthly average maximum and minimum temperatures for each month over the 30-year normals period, resulting in 360 (12 X 30 = 360) entries for maximum temperature and 360 observations for minimum temperature. The 30-year average of the adjusted maximum and minimum temperatures for each of the 12 months constitutes NOAA's monthly normals.

Q. Given that NOAA has made adjustments to more accurately reflect temperatures over the 30-year normals period, why are NOAA's monthly normals not sufficient for the Staff's purposes?

A. Since the NOAA adjustments for changes in measurement conditions and climate are to monthly temperatures over the period, they do not contain sufficient information for weather-normalizing electricity use. The Staff needs *daily* temperature

normals because the relationship between the demand for electricity and temperature is non-linear. *U*sage increases more in response to a one degree increase in extremely hot temperatures (or to a one degree decrease in extremely cold temperatures) than to a one degree change in milder temperatures, *daily* temperatures that reflect these temperature extremes must be used so as not to understate the effects of weather on electricity sales and revenues.

Q. Is it possible to incorporate the NOAA adjustments into the actual daily minimum and maximum temperatures?

A. Yes. The Staff has developed a methodology to derive adjusted daily temperatures from the monthly NOAA Sequentials.

Q. How did you make sure that the adjusted daily temperatures by this method correspond to NOAA's normals?

A. I first calculated the monthly averages of the daily maximum and minimum temperatures that were adjusted. I then verified that these monthly averages are equal to the benchmarks, which are the monthly sequential temperatures that are used by NOAA to calculate its 30-year temperature normals. I also verified that the monthly averages of the adjusted daily temperatures are equal to NOAA's 12 monthly normal temperatures for the Kansas City station. The crosschecks were successful in this case, thus insuring that the adjusted daily temperature products supplied to Mr. Lange are consistent with the NOAA normals. The calculations and results have been made available to the parties in the computer spreadsheets that make up my workpapers.

Q. Is using NOAA's Normals period for determining normal weather consistent with the Staff's position in previous cases?

A. Yes. Dr. Wayne Decker, the State Climatologist for Missouri, testified as a witness for the Staff in Case No. GR-92-165 as to the appropriateness of using the NOAA and WMO "normals" period. The Staff has used this time period and adjusting methodology in all of the electric and gas cases since then.

Q. Has the Commission made any findings with respect to the use of NOAA's thirty-year normal?

A. Yes. The use of the NOAA 30-year normal and 30-year normals period complies with a provision of the Commission's Report and Order in the Missouri Gas Energy rate case, Case No. GR-96-285. At page 18 of its Report and Order, the Commission stated: "The Commission finds that NOAA's 30-year normals is the more appropriate benchmark . . . . In addition, the data upon which Staff's recommendation is based has gone through the processes established by NOAA to ensure the best data possible." The 30-year period has been accepted consistently in electric rate cases since then.

ADJUSTMENTS TO KWH SALES AND RATE REVENUE

Q. Please describe Staff's ratemaking treatment of rate revenues and kWh sales.

A. Schedule CW-2 contains an explanation of the basic ratemaking concepts used in Staff's treatment of rate revenues and kWh sales.

Q. Please briefly describe the contents of Schedules CW-3 through CW-6.

A. Schedule CW-3 (MPS) and Schedule CW-5 (L&P Electric) have been compiled to serve a dual purpose. The columns of my schedules present the results of each of the multiple adjustments (annualizations, normalizations, and growth adjustments) that were made to rate revenues. The rows of my schedules present annualized, normalized, growth-

adjusted rate revenues by rate class. The row totals are inputs into the class cost of service / rate design analysis.

Schedule CW-4 (MPS) and Schedule CW-6 (L&P) possess a similar layout but the values contained in the cells represent the kWh sales corresponding to each adjustment to rate revenue.

Q. What is the relationship between the adjustments to Missouri rate revenues shown on your Schedules CW-3 (MPS) and CW-5 (L&P Electric) and the S-1 adjustments shown on Accounting Schedule 10 - Adjustments to Income Statement for each of the respective Aquila divisions?

A. The column total for each of the adjustments to Missouri rate revenue shown on my Schedules CW-3 (MPS) and CW-5 (L&P Electric) has a corresponding S-1 adjustment shown on Accounting Schedule 10 - Adjustments to Income Statement. The Accounting Schedule does not record adjustments to kWh sales.

Q. What specific adjustments were made to test year kWh sales and rate revenues?

A. The adjustments to test year kWh sales and rate revenues that were made in this case were: (i) annualization for 365 days (days adjustment); (ii) annualization for billing corrections; (iii) annualization for large customer load changes; (iv) annualization due to growth in the number of customers; (v) weather normalization; and (vi) adjustment for a rate change that occurred during the update period.

Q. Are you responsible for the contents of Schedules CW-3 through CW-6?

A. While I am responsible for compiling these tables, the values contained within them represent the collective effort of three Staff witnesses: Shawn Lange, Amanda McMellen, and me.

Q. Please briefly describe the information provided by Mr. Lange in developing Schedules CW-3 through CW-6.

A. Mr. Lange provided the weather normalization adjustments to kWh sales by rate code and the adjustments that reflect a 365-day billing year. These adjustments to test year kWh sales are an input both into my determination of the effect of weather normalization on rate revenues and into Mr. Lange's determination of the normalized hourly system load used in Staff's production cost simulation (fuel) model.

Q. Please describe the information provided by Ms. McMellen in developing Schedules CW-3 through CW-6.

A. Staff witness McMellen provided the adjustments to annualize kWh sales and rate revenues for the large power service customers. She also provided the adjustments that reflect the effect that growth (or decline) in the number of customers had on both kWh sales and rate revenues.

Q. What was your role in developing the numbers contained in Schedules CW-3 through CW-6?

A. I am responsible for compiling the "starting point" (As Billed Sales and As Billed Revenue). I am responsible for calculating the adjustments to revenues that correspond to Mr. Lange's weather normalization and days adjustment to kWh sales. In addition, I am also responsible for the annualization to rate revenue that reflects the rate change that occurred on March 1, 2006, as an outcome of Case No. ER-2005-0436.

WEATHER NORMALIZATION OF REVENUES

Q. Please describe the method Staff used to weather normalize rate revenue.

A. The corresponding effect that the weather normalization of kWh sales had on rate revenues was calculated by a method known as "average realization". This method applies the average price per kWh for each specific month to the weather adjustment to that month's kWh sales. The average realization method estimates the additional revenue associated with additional kWh sales by assuming that these additional sales would be priced at the same average rate as all other sales in that month.

Q. What refinement did you make to the average realization method you used in this case?

A. Fixed charges that customers currently pay were removed from the calculation of the average monthly price. Weather affects only the energy usage of each existing customer and, thus, only affects those charges directly related to kWh usage

Q. Which MPS and L&P rate codes were weather-normalized using the average realization method?

A. This method was applied to all of the rate codes for which Mr. Lange had computed a weather adjustment to kWh sales. For MPS, weather adjustments were computed for residential rate codes MO860 and MO870; for small general service rate codes MO710 & 711 (combined) and MO740; and for large general service rate code MO720. For L&P Electric, weather adjustments were computed for residential rate codes (MO910, MO911, MO913, MO914, MO915, MO920, MO921, MO922); small general service rate codes (MO930, MO931, MO932, MO933, MO934, MO941); and large general service rate code (MO940).

No changes were made to test year actual revenues for the remaining rate codes because they are not weather-sensitive and, therefore, required no adjustments due to the effects of weather.

Q. What was the source of the monthly average rate per kWh that was used to weather normalize rate revenue?

A. In situations where only one rate value applies to all monthly usage, the monthly rate per kWh used was taken directly from the existing test year rate schedule. When multiple energy rates exist and/or demand charges exist, the monthly average rate per kWh was taken directly from Schedules RDA-1 and RDA-2 attached to the direct testimony of Aquila witness Robert D. Adkins.

DAYS ADJUSTMENTS TO RATE REVENUE

Q. Please describe the rationale for calculating a days adjustment to kWh sales and rate revenue.

A. Staff's days adjustment (also known as an "unbilled" adjustment) represents the change in kWh sales and rate revenues associated with adjusting the 12 test year billing months to the equivalent of 365 days. This adjustment is necessary to ensure that kWh sales and revenues that are measured by billing year, which may be longer or shorter than a calendar year, will properly "match" expenses that are measured by calendar year.

Q. Please describe the process Staff used to calculate the days adjustment to rate revenue.

A. Mr. Lange computed an annual days adjustment to kWh sales for each rate code that he weather normalized. I converted Mr. Lange's annual days adjustment to a series of twelve monthly adjustments by assuming that these annual kWhs are distributed

throughout the months in the year in the same proportion as weather-normalized kWhs. I then calculated the monthly days adjustment to rate revenue by multiplying monthly days adjustments to kWh sales by the same associated monthly rate (cents per kWh) that was used to calculate the weather adjustment to rate revenue.

EFFECT OF THE RATE CHANGE ON REVENUES

Q. Please describe the rationale for annualizing revenues to reflect a rate change that occurred during the update period.

A. One outcome of Case No. ER-2005-0436 was the implementation of new permanent rates effective March 1, 2006. These rates were designed to collect an additional $38.5 million in annual revenue for MPS and $6.3 million for L&P Electric.

I normalized the revenue for the test year to reflect the difference between the amount that was actually billed to customers and the revenue that Aquila would have collected if the new rates had been in effect during the test year.

Q. Which months in the test year were adjusted to reflect the effect of the rate change on revenues?

A. Since the rate change occurred after the calendar year 2005 test year, all revenues were affected since all usage in those months had been billed on "old" rates.

Q. Please describe the process Staff used to calculate the effect of the rate change on revenues.

A. The percentage increase in revenues for each rate class approved as a result of Case No. ER-2005-0436 was applied to the total test year revenue for each class.

ADJUSTMENTS TO RATE REVENUE DUE TO RATE SWITCHING

Q. What adjustment to rate revenue did you make to reflect rate switching?

A. In June 2005, a test program was implemented that provided an alternate "fixed billing" to selected Aquila L&P residential customers for a one-year period. There were approximately 530 customers in this experimental program during the June 2005 – May 2006 program year and approximately 1,100 customers who contracted for the June 2006 – May 2007 program year. The kWh sales and rate revenues associated with these customers were recorded as rate code MO916.

To annualize this rate code for the test year, I applied the average sales and revenue of this code for January through May of 2006 to the corresponding months of the test year, and made a corresponding and equal reduction to the sales and revenues of the rate codes that were the source of these customers. Due to a significant increase in customers at the beginning of the second year of the test program, I replaced the June through December 2005 values with the average of the more representative 2006 values, and likewise reduced the source rate codes by an equal amount.

RATE SCHEDULE CHANGES

Q. What changes to rate schedules occurred subsequent to the test year?

A. As a result of Case No. ER-2005-0436, several rate schedules (rate codes) were deleted, added, or consolidated. A diagram of these changes is shown on Schedules CW-7 (MPS) and CW-8 (L&P). To reflect these changes, I have created Schedule CW-9 and CW-10 which present the annualized, normalized, growth-adjusted kWh sales and rate revenue for MPS and L&P by current rate classes.

Q. Does this conclude your direct testimony?

A. Yes, it does.

TESTIMONY FILED BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

Case Number	Company	Issue
ER-2006-0315	Empire District Electric	Revenue
ER-2006-0314	Kansas City Power & Light Company	Calculation of Normal Weather, Revenue
GR-2006-0387	ATMOS Energy Corporation	Calculation of Normal Weather
GR-2006-0422	Missouri Gas Energy	Calculation of Normal Weather
ER-2007-0002	Union Electric d/b/a AmerenUE	Calculation of Normal Weather, Large Electric Customer Annualization
GR-2007-0003	Union Electric d/b/a AmerenUE	Calculation of Normal Weather

STAFF'S RATEMAKING TREATMENT OF REVENUES AND KWH SALES

Rationale for Making Adjustments

Kilowatt-hour (kWh) sales and revenue are analyzed for the test year, a historical 12-month time period, and update period, if any, that the Commission determines should be used for analyzing the costs of providing service to Missouri retail customers , based on the "matching principle" of ratemaking.

An accurate quantification of total Company kWh sales, including losses, is important for determining fuel and purchased power costs. Hourly net system loads, updated for known and measurable changes in kWh sales, are reflected in the production cost simulation model (fuel run) to ensure that the cost of generation and purchases is based on total net system requirements that are consistent with the revenue adjustments.

Staff quantifies two measures of revenue: rate revenue and operating revenue. Rate revenue is generated by the application of current Missouri rate schedules to the electrical usage of the Company's customers. The intent of adjustments to test year Missouri rate revenues is to estimate the revenue that the Company would have collected on an annual, normal-weather basis, based upon information "known and measurable" at the end of the update period. Missouri retail rate revenue will be used to compute the final rate levels that result from this case.

Operating revenue is the combination of rate revenue plus other ("non-rate") revenue. Examples of non-rate revenues are late payment charges, forfeited discounts, and margin (profits) from off-system sales. The difference between Missouri operating revenue and the Company's total revenue requirement, or total cost of service, will be used to determine the amount of any revenue increase (or decrease) that results from this case.

Categories of Adjustments

The two major categories of adjustments are known as normalizations and annualizations.

Normalizations

Normalizations deal with test year events that are unusual and unlikely to be repeated in the years when the new rates from this case are in effect. Test year weather is an example. It is unlikely that the weather that occurred in the test year will, on average, be repeated in the future, but what weather will actually occur is not predictable. The objective of the weather normalization process is to re-state test year kWh sales and rate revenues on a "normal-weather" basis.

Annualizations

Annualizations are adjustments that re-state test year results as if conditions known at the end of the update period had existed throughout the entire test year.

A common example of a revenue annualization is a rate change that occurs during the test year. In this situation, actual test year rate revenues will be understated or overstated by the difference between the amount that was actually billed to customers and the revenue that would have been realized by the Company if the rates in effect at the end of the update period had been in effect throughout the entire test year.

An example of an annualization that affects both kWh sales and rate revenues is a large customer that either begins or ceases taking service during the analysis period. In the situation where a large customer ceases business, in order to accurately reflect revenues going forward, test year revenues should be decreased by the amount of revenue the customer provided the Company. A corresponding reduction to kWh sales should be made so that fuel and purchased power expense will reflect the reduction in costs the company will no longer incur. Conversely, when a large customer begins service, test year revenue, kWh sales, and fuel expense should be increased to reflect both the costs and the revenues associated with serving the new customer on an annual basis.

Customer Growth

Customer growth adjustments are annualizations that reflect any additional sales and revenues that would have occurred if the total number of customers on the system at the end of the update period had been customers during all 12 months of the test year.

AQUILA NETWORKS - MPS ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL RATE REVENUE BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		Billed Revenue from Permanent Rates (1)	Annualizations to Revenue (1)	Normalizations to Revenue (1)	Annualization for Growth/Large Power Annualizations(2)	Total Rate Revenue
	Residential					
MO860	Residential General Use	$129,224,924	$16,111,687	($3,821,424)	$0	
MO870	Residential w/ Space Heat	$59,140,559	$7,575,962	$365,079	$0	
	Total Residential	**$188,365,483**	**$23,687,649**	**($3,456,345)**	**$8,785,686**	**$217,382,473**
	Small General Service					
MO710/711	Small GS	$50,444,542	$5,259,438	($570,649)	$0	
MO716	Small GS w/kW mtr, Pri	$45,641	$5,142	$0	$0	
MO740	Schools & Churches	$2,036,364	$214,932	($34,783)	$0	
MO800	Muni Water Pumps	$464,342	$52,316	$0	$0	
MO810	Muni Park & Rec	$198,417	$22,342	$0	$0	
MO811	Muni Park & Rec, 3-phase	$196,762	$22,168	$0	$0	
	Total Small GS	**$53,386,068**	**$5,576,337**	**($605,433)**	**($2,001,933)**	**$56,355,040**
	Large General Service					
MO720	Large GS, Secondary	$42,938,351	$2,889,927	($400,616)	$0	
MO725	Large GS, Primary	$1,660,066	$130,290	$0	$0	
MO721	RTP (721)	$202,588	$0	$0	$0	
	Total Large GS	**$44,801,005**	**$3,020,216**	**($400,616)**	**$654,458**	**$48,075,063**
	Large Power					
MO730	Large PS, Secondary	$23,401,518	$1,595,032	$0	$6,133,538	
MO735	Large PS, Primary	$29,699,179	$2,024,276	$0	($2,935,891)	
MO731	RTP (731)	$1,247,174	$0	$0	$0	
MO737	RTP (737)	$1,231,883	$0	$0	$0	
	Total Large Power	**$55,579,754**	**$3,619,308**	**$0**	**$3,197,647**	**$62,396,708**
	Special					
MO919	Special Contract (Modine)	$232,969	$73,121	$0	($306,090)	
MO650	Thermal Energy Storage	$344,177	$38,777	$0	$0	
	Total Special	**$577,146**	**$111,898**	**$0**	**($306,090)**	**$382,954**
MONxx	**Lighting**	**$5,692,362**	**$641,335**	**$0**	**$0**	**$6,333,697**
	Unaccounted for	($128,219)		$0		($128,219)
MO888	Interdepartmental	$10,404				$10,404
Total MO $ from Permanent Rates		**$348,284,003**	**$36,656,744**	**($4,462,394)**	**$10,329,768**	**$390,808,121**

(1) Sponsored by Staff witness Curt Wells
(2) Sponsored by Amanda McMellen

AQUILA NETWORKS - MPS ELECTRIC
CASE NO. ER-2007-0004
DETAILS OF ADJUSTMENTS TO RATE REVENUE BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		Annuallization for Billing Corrections	Normalization for Weather	Annualization for 365 Days	Annualization for Rate Change	Annualization for Growth/Load Changes/ Lg Power Ann (through 9/30/2006)
	Residential					
MO860	Residential General Use	($390,400)	($3,821,424)	($321,249)	$16,823,335	
MO870	Residential w/ Space Heat	($348,559)	$365,079	($50,144)	$7,974,665	
	Total Residential	**($738,959)**	**($3,456,345)**	**($371,393)**	**$24,798,001**	**$8,785,686**
	Small General Service					
MO710/711	Small GS	($116,757)	($570,649)	($206,477)	$5,582,673	
MO716	Small GS w/kW mtr, Pri	$0	$0	$0	$5,142	
MO740	Schools & Churches	($5,181)	($34,783)	($4,326)	$224,439	
MO800	Muni Water Pumps	$0	$0	$0	$52,316	
MO810	Muni Park & Rec	$0	$0	$0	$22,342	
MO811	Muni Park & Rec, 3-phase	$0	$0	$0	$22,168	
	Total Small GS	**($121,939)**	**($605,433)**	**($210,803)**	**$5,909,079**	**($2,001,933)**
	Large General Service					
MO720	Large GS, Secondary	($380,978)	($400,616)	($35,004)	$3,305,909	$0
MO725	Large GS, Primary	$0	$0	$0	$130,290	$0
MO721	RTP (721)	$0	$0	$0	$0	$0
	Total Large GS	**($380,978)**	**($400,616)**	**($35,004)**	**$3,436,198**	**$654,458**
	Large Power					
MO730	Large PS, Secondary	$0	$0	$0	$1,595,032	$6,133,538
MO735	Large PS, Primary	$0	$0	$0	$2,024,276	($2,935,891)
MO731	RTP (731)	$0	$0	$0	$0	$0
MO737	RTP (737)	$0	$0	$0	$0	$0
	Total Large Power	**$0**	**$0**	**$0**	**$3,619,308**	**$3,197,647**
	Special					
MO919	Special Contract (Modine)	$0	$0	$0	$73,121	($306,090)
MO650	Thermal Energy Storage	$0	$0	$0	$38,777	$0
	Total Special	**$0**	**$0**	**$0**	**$111,898**	**($306,090)**
MONxx	**Lighting**	**$0**	**$0**	**$0**	**$641,335**	**$0**
	Unaccounted for					
MO888	Interdepartmental					
Total MO $ from Permanent Rates		**($1,241,875)**	**($4,462,394)**	**($617,201)**	**$38,515,820**	**$10,329,768**

(1) Sponsored by Staff witness Curt Wells
(2) Sponsored by Amanda McMellen

AQUILA NETWORKS - MPS ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL KWH SALES BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		As Billed Sales (kWh) (1)	Annualizations to kWh Sales(1)	Normalizations to kWh Sales (2)	Annualizations for Growth & Large Power(3)	Total Sales (kWh)
	Residential					
MO860	Residential General Use	1,694,365,626	(10,274,071)	(52,362,375)	-	
MO870	Residential w/ Space Heat	945,272,548	(8,105,481)	8,309,206	-	
	Total Residential	**2,639,638,174**	**(18,379,553)**	**(44,053,169)**	**129,005,647**	**2,706,211,099**
	Small General Service					
MO710/711	Small GS	766,452,293	(5,177,626)	(7,522,277)	-	
MO716	Small GS w/kW mtr, Pri	812,080	-	-	-	
MO740	Schools & Churches	30,281,637	(159,273)	(451,206)	-	
MO800	Muni Water Pumps	7,439,925	-	-	-	
MO810	Muni Park & Rec	2,477,232	-	-	-	
MO811	Muni Park & Rec, 3-phase	2,445,016	-	-	-	
	Total Small GS	**809,908,183**	**(5,336,900)**	**(7,973,483)**	**(26,311,355)**	**770,286,445**
	Large General Service					
MO720	Large GS, Secondary	819,979,713	(9,061,547)	(5,314,134)	-	
MO725	Large GS, Primary	34,053,319	-	-	-	
MO721	RTP (721)	3,980,634	-	-	-	
	Total Large GS	**858,013,666**	**(9,061,547)**	**(5,314,134)**	**11,982,118**	**855,620,103**
	Large Power					
MO730	Large PS, Secondary	484,553,710	-	-	157,433,202	
MO735	Large PS, Primary	772,013,509	-	-	(108,124,284)	
MO731	RTP (731)	23,869,162	-	-	-	
MO737	RTP (737)	18,647,331	-	-	-	
	Large Power	**1,299,083,712**	**-**	**-**	**49,308,918**	**1,348,392,630**
	Special					
MO919	Special Contract (Modine)	5,560,251	-	-	(5,560,251)	-
MO650	Thermal Energy Storage	8,151,169	-	-	-	8,151,169
	Total Special	**13,711,420**	**-**	**-**	**(5,560,251)**	**8,151,169**
MONxx	**Lighting**	**44,565,552**	**-**	**-**	**-**	**44,565,552**
	Unaccounted for	1,000				**1,000**
MO888	Interdepartmental	342,000				342,000
	Total MO kWh Sales	**5,665,263,707**	**(32,777,999)**	**(57,340,786)**	**158,425,077**	**5,733,569,999**

(1) Compiled by Staff witness Curt Wells
(2) Sponsored by Shawn Lange
(3) Sponsored by Amanda McMellen

AQUILA NETWORKS - MPS ELECTRIC
CASE NO. ER-2007-0004
DETAILS OF ADJUSTMENTS TO MISSOURI SALES BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		Annualization for Billing Corrections	Normalization for Weather	Annualization for 365 Days	Annualizations for Growth & Large Power(3)
	Residential				
MO860	Residential General Use	(5,623,291)	(52,362,375)	(4,650,780)	
MO870	Residential w/ Space Heat	(7,363,801)	8,309,206	(741,680)	
	Total Residential	**(12,987,093)**	**(44,053,169)**	**(5,392,460)**	**129,005,647**
	Small General Service				
MO710/711	Small GS	(2,155,072)	(7,522,277)	(3,022,554)	
MO716	Small GS w/kW mtr, Pri	-	-	-	
MO740	Schools & Churches	(96,228)	(451,206)	(63,045)	
MO800	Muni Water Pumps		-	-	
MO810	Muni Park & Rec		-	-	
MO811	Muni Park & Rec, 3-phase		-	-	
	Total Small GS	**(2,251,301)**	**(7,973,483)**	**(3,085,599)**	**(26,311,355)**
	Large General Service				
MO720	Large GS, Secondary	(8,548,428)	(5,314,134)	(513,119)	
MO725	Large GS, Primary		-	-	
MO721	RTP (721)		-	-	
	Total Large GS	**(8,548,428)**	**(5,314,134)**	**(513,119)**	**11,982,118**
	Large Power				
MO730	Large PS, Secondary		-	-	157,433,202
MO735	Large PS, Primary		-	-	(108,124,284)
MO731	RTP (731)		-	-	
MO737	RTP (737)		-	-	
	Large Power	-	-	-	**49,308,918**
	Special				
MO919	Special Contract (Modine)		-	-	(5,560,251)
MO650	Thermal Energy Storage		-	-	
	Total Special	-	-	-	**(5,560,251)**
MONxx	**Lighting**		-	-	
	Unaccounted for				
MO888	Interdepartmental				
	Total MO kWh Sales	**(23,786,821)**	**(57,340,786)**	**(8,991,178)**	**158,425,077**
		(32,777,999)			43,748,667
					114,676,410

(1) Compiled by Staff witness Curt Wells
(2) Sponsored by Shawn Lange
(3) Sponsored by Amanda McMellen

AQUILA NETWORKS - L&P ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL RATE REVENUE BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30,2006)

		Billed Revenue from Permanent Rates (1)	Annualizations to Revenue (1)	Normalizations to Revenue (1)	Annualization for Growth (through 9/30/2006) (2)	Total Rate Revenue
	Residential					
MO910	Residential - General Use	$21,015,785	$1,669,173	($614,689)	$0	
MO911	Multiple Occupancy	$186,568	$17,233	($5,591)	$0	
MO920	Residential - Space Heat	$15,298,955	$1,238,716	$463,241	$0	
MO921	Multiple Occupancy	$383,380	$30,321	$11,159	$0	
MO913	Residential - Water Heat	$5,225,487	$417,611	($80,831)	$0	
MO914	Multiple Occupancy	$4,698	$423	($90)	$0	
MO915	Residential - Other Use	$601,577	$44,856	($8,784)	$0	
MO916	Residential - Fixed Bill	$796,284	$69,452	$0	$0	
MO922	Residential - Limited Demand	$27,488	$2,127	$692	$0	
	Total Residential	**$43,540,221**	**$3,489,913**	**($234,894)**	**$181,831**	**$46,977,070**
	Small General Service					
MO930	General Service - Limited Demand	$2,139,970	$127,678	($5,173)	$0	
MO931	General Service - General Use	$3,339,165	$211,833	($23,191)	$0	
MO932	General Service - Limited w/ Space Heat	$343,382	$22,708	$656	$0	
MO933	General Service - Electric Space Heat	$1,453,124	$86,445	($520)	$0	
MO934	General Service - Schools and Churches	$395,580	$23,061	($2,231)	$0	
MO941	Non-Res Space/Water Heat	$141,613	$8,583	$805	$0	
	Total Small GS	**$7,812,834**	**$480,307**	**($29,654)**	**$91,140**	**$8,354,627**
MO940	**Large General Service**	**$18,576,834**	**$1,012,974**	**($84,187)**	**$1,046,101**	**$20,551,722**
MO944	**Large Power Service**	**$24,931,539**	**$522,817**	**$0**	**$2,546,853**	**$28,001,209**
	Lighting					
MOSJx	Street & Private Area Lighting	$2,237,158	$142,083	$0	$0	
MO971	Outdoor Night Lighting	$34,342	$2,181	$0	$0	
MO972	Street Lighting	$32,526	$2,066	$0	$0	
MO973	Traffic Signals	$21,816	$1,386	$0	$0	
	Total Lighting	**$2,325,842**	**$147,715**	**$0**	**$0**	**$2,473,557**
	Interdepartmental	$481				**$481**
	Unaccounted for	($80,322)				**($80,322)**
Total MO $ from Permanent Rates		**$97,107,428**	**$5,653,727**	**($348,736)**	**$3,865,925**	**$106,278,344**

(1) Sponsored by Staff witness Curt Wells
(2) Sponsored by Staff witness Amanda McMellen

AQUILA NETWORKS - L&P ELECTRIC
CASE NO. ER-2007-0004
DETAILS OF ADJUSTMENTS TO RATE REVENUE BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30,2006)

		Annualization for Billing Corrections	Annualization for Rate Change	Normalization for Weather	Annualization for 365 Days	Annualization for Growth/Load Changes/ Lg Power Ann (through 9/30/2006)	Total Adjustments
	Residential						
MO910	Residential - General Use	($282)	$1,770,548	($614,689)	($101,093)		$1,054,484
MO911	Multiple Occupancy	$1,586	$15,901	($5,591)	($254)	$0	$11,641
MO920	Residential - Space Heat	($121)	$1,363,868	$463,241	($125,030)	$0	$1,701,957
MO921	Multiple Occupancy	$0	$34,084	$11,159	($3,763)	$0	$41,480
MO913	Residential - Water Heat	$0	$446,223	($80,831)	($28,612)	$0	$336,780
MO914	Multiple Occupancy	$0	$404	($90)	$20	$0	$333
MO915	Residential - Other Use	$0	$51,154	($8,784)	($6,298)	$0	$36,072
MO916	Residential - Fixed Bill	$0	$69,452	$0	$0	$0	$69,452
MO922	Residential - Limited Demand	$0	$2,431	$692	($304)		$2,819
	Total Residential	**$1,182**	**$3,754,065**	**($234,894)**	**($265,334)**	**$181,831**	**$3,436,850**
	Small General Service						
MO930	General Service - Limited Demand	($289)	$135,110	($5,173)	($7,143)	$0	$122,505
MO931	General Service - General Use	($352)	$210,673	($23,191)	$1,512	$0	$188,642
MO932	General Service - Limited w/ Space Heat	$4,489	$21,901	$656	($3,682)	$0	$23,364
MO933	General Service - Electric Space Heat	$1,980	$91,909	($520)	($7,444)	$0	$85,925
MO934	General Service - Schools and Churches	$0	$24,867	($2,231)	($1,806)	$0	$20,830
MO941	Non-Res Space/Water Heat	$0	$9,017	$805	($435)	$0	$9,387
	Total Small GS	**$5,828**	**$493,477**	**($29,654)**	**($18,998)**	**$91,140**	**$541,794**
MO940	**Large General Service**	**$0**	**$1,164,833**	**($84,187)**	**($151,859)**	**$1,046,101**	**$1,974,888**
MO944	**Large Power Service**	**$0**	**$522,817**	**$0**	**$0**	**$2,546,853**	**$3,069,670**
	Lighting						
MOSJx	Street & Private Area Lighting	$0	$142,083	$0	$0	$0	$142,083
MO971	Outdoor Night Lighting	$0	$2,181	$0	$0	$0	$2,181
MO972	Street Lighting	$0	$2,066	$0	$0	$0	$2,066
MO973	Traffic Signals	$0	$1,386	$0	$0	$0	$1,386
	Total Lighting	**$0**	**$147,715**	**$0**	**$0**	**$0**	**$147,715**
	Interdepartmental						
	Unaccounted for						
Total MO $ from Permanent Rates		**$7,010**	**$6,082,908**	**($348,736)**	**($436,191)**	**$3,865,925**	**$9,170,917**

(1) Sponsored by Staff witness Curt Wells
(2) Sponsored by Staff witness Amanda McMellen

AQUILA NETWORKS - L&P ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL KWH SALES BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		As Billed Sales (kWh) (1)	Annualizations to kWh Sales(1)	Normalizations to kWh Sales (2)	Annualizations for Growth & Large Power(3)	Total Sales (kWh)
	Residential					
MO910	Residential - General Use	315,971,730	(1,702,228)	(9,415,748)	-	
MO911	Multiple Occupancy	2,458,748	14,440	(85,313)	-	
MO920	Residential - Space Heat	317,641,929	(2,186,781)	9,262,907	-	
MO921	Multiple Occupancy	6,938,995	(65,828)	219,739	-	
MO913	Residential - Water Heat	88,309,321	(487,260)	(1,126,556)	-	
MO914	Multiple Occupancy	70,800	334	(1,356)	-	
MO915	Residential - Other Use	6,030,544	(109,193)	(140,256)	-	
MO916	Residential - Fixed Bill	11,945,245	-	-	-	
MO922	Residential - Limited Demand	528,514	(5,281)	14,145	-	
	Total Residential	**749,895,827**	**(4,541,797)**	**(1,272,438)**	**7,888,393**	**751,969,985**
	Small General Service					
MO930	General Service - Limited Demand	23,168,158	(125,922)	(35,952)	-	
MO931	General Service - General Use	47,657,979	19,791	(286,771)	-	
MO932	General Service - Limited w/ Space Heat	4,223,955	(156)	21,400	-	
MO933	General Service - Electric Space Heat	22,987,115	(92,896)	44,200	-	
MO934	General Service - Schools and Churches	4,690,165	(30,423)	(27,174)	-	
MO941	Non-Res Space/Water Heat	2,705,783	(7,605)	19,807	-	
	Total Small GS	**105,433,155**	**(237,211)**	**(264,490)**	**1,309,199**	**106,240,653**
MO940	**Large General Service**	**382,940,842**	**(2,586,295)**	**(1,008,490)**	**20,512,007**	**399,858,064**
MO944	**Large Power Service**	**655,270,954**		**-**	**77,539,126**	**732,810,080**
	Lighting					
MOSJx	Street & Private Area Lighting	19,816,936	-	-	-	
MO971	Outdoor Night Lighting	462,172	-	-	-	
MO972	Street Lighting	856,303	-	-	-	
MO973	Traffic Signals	482,065	-	-	-	
	Total Lighting	**21,617,476**	**-**	**-**	-	**21,617,476**
	Unaccounted for	-				-
	Interdepartmental	21,000				21,000
	Total MO kWh Sales	**1,915,179,254**	**(7,365,303)**	**(2,545,418)**	**107,248,724**	**2,012,517,258**

(1) Compiled by Staff witness Curt Wells
(2) Sponsored by Staff witness Shawn Lange
(3) Sponsored by Staff witness Amanda McMellen

AQUILA NETWORKS - L&P ELECTRIC
CASE NO. ER-2007-0004
DETAILS OF ADJUSTMENTS TO MISSOURI SALES BY RATE CODE
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30, 2006)

		Annualization for Billing Corrections	Normalization for Weather	Annualization for 365 Days	Annualizations for Growth & Large Power(3)
	Residential				
MO910	Residential - General Use	(4,771)	(9,415,748)	(1,697,457)	-
MO911	Multiple Occupancy	18,690	(85,313)	(4,250)	-
MO920	Residential - Space Heat	(3,291)	9,262,907	(2,183,490)	-
MO921	Multiple Occupancy	-	219,739	(65,828)	-
MO913	Residential - Water Heat	-	(1,126,556)	(487,260)	-
MO914	Multiple Occupancy	-	(1,356)	334	-
MO915	Residential - Other Use	-	(140,256)	(109,193)	-
MO916	Residential - Fixed Bill	-	-	-	-
MO922	Residential - Limited Demand	-	14,145	(5,281)	-
	Total Residential	10,628	**(1,272,438)**	**(4,552,425)**	**7,888,393**
	Small General Service				
MO930	General Service - Limited Demand	(3,645)	(35,952)	(122,277)	-
MO931	General Service - General Use	(5,757)	(286,771)	25,548	-
MO932	General Service - Limited w/ Space Heat	63,340	21,400	(63,496)	-
MO933	General Service - Electric Space Heat	35,437	44,200	(128,333)	-
MO934	General Service - Schools and Churches	-	(27,174)	(30,423)	-
MO941	Non-Res Space/Water Heat	-	19,807	(7,605)	-
	Total Small GS	**89,375**	**(264,490)**	**(326,586)**	**1,309,199**
MO940	**Large General Service**	**-**	**(1,008,490)**	**(2,586,295)**	**20,512,007**
MO944	**Large Power Service**	**-**	**-**	**-**	**77,539,126**
	Lighting				
MOSJx	Street & Private Area Lighting	-	-	-	-
MO971	Outdoor Night Lighting	-	-	-	-
MO972	Street Lighting	-	-	-	-
MO973	Traffic Signals	-	-	-	-
	Total Lighting	**-**	**-**	**-**	**-**
	Unaccounted for				
	Interdepartmental				
	Total MO kWh Sales	**100,003**	**(2,545,418)**	**(7,465,306)**	**107,248,724**

(1) Compiled by Staff witness Curt Wells
(2) Sponsored by Staff witness Shawn Lange
(3) Sponsored by Staff witness Amanda McMellen

TARIFF CONSOLIDATIONS / ELIMINATIONS THAT RESULTED FROM ER-2005-0436
AQUILA NETWORKS - MPS

Rate Classes & Rate Codes TY 2005			Rate Classes & Rate Codes Post-March 2006	
Rate Code			Rate Code	
	Residential			**Residential**
MO860	Residential General Use		MO860	Residential General Use
MO870	Residential w/ Space Heat		MO870	Residential w/ Space Heat
		New	MO815	Residential - Other Use
	Small General Service			**Small General Service**
MO710/711	Small GS - Secondary		MO710/711	Small GS - Secondary
MO740	Schools & Churches		MO710/711	Small GS - Secondary
MO800	Muni Water Pumps		MO710/711	Small GS - Secondary
MO810	Muni Park & Rec		MO710/711	Small GS - Secondary
MO811	Muni Park & Rec, 3-phase		MO710/711	Small GS - Secondary
MO716	Small GS w/kW mtr, Pri	Frozen	MO716	Small GS w/kW mtr, Pri
		New	MO728	SGS Short-Term Service
	Large General Service			**Large General Service**
MO720	Large GS, Secondary		MO720	Large GS, Secondary
MO725	Large GS, Primary		MO725	Large GS, Primary
MO721	RTP (721)		MO721	RTP (721)
	Large Power			**Large Power**
MO730	Large PS, Secondary		MO730	Large PS, Secondary
			MO919	Special Contract (Modine)
MO735	Large PS, Primary		MO735	Large PS, Primary
MO731	RTP (731)		MO731	RTP (731)
MO737	RTP (737)		MO737	RTP (737)
	Special			**Special**
MO919	Special Contract (Modine)			
MO650	Thermal Energy Storage		MO650	Thermal Energy Storage
MONxx	**Lighting**		MONxx	**Lighting**

TARIFF CONSOLIDATIONS / ELIMINATIONS THAT RESULTED FROM ER-2005-0436
AQUILA NETWORKS - L&P

Rate Classes & Rate Codes TY 2005			Rate Classes & Rate Codes Post-March 2006	
Rate Code			Rate Code	
	Residential			**Residential**
MO910/911	Residential - General Use		MO910/91	Residential - General Use
MO913/914	Residential - Water Heat		MO910/91	Residential - General Use
MO915	Residential - Other Use		MO915	Residential - Other Use
MO916	Residential - Fixed Bill		MO916	Residential - Fixed Bill
MO920/921	Residential - Space Heat		MO920/92	Residential - Space Heat
MO922	Res Sep Mtrd Space/Water Heat	Frozen	MO922	Residential - Sep Mtrd Heat
	Small General Service			
MO930	General Service - Limited Demand		MO930	General Service - Limited Demand
MO932	General Service - Limited w/ Space Heat		MO930	General Service - Limited Demand
MO934	General Service - Schools and Churches		MO930	General Service - Limited Demand
		New	MO928	SGS Short-Term Service
MO931	General Service - General Use		MO931	General Service - General Use
MO933	General Service - Electric Space Heat		MO931	General Service - General Use
MO941	Non-Res Sep Mtrd Space/Water Heat	Frozen	MO941	Non-Res Sep Mtrd Space/Water Heat
MO940	**Large General Service**		**MO940**	**Large General Service**
MO944	**Large Power Service**		**MO944**	**Large Power Service**
	Lighting			**Lighting**
MOSJx	Street & Private Area Lighting		MOSJx	Street & Private Area Lighting
MO971	Outdoor Night Lighting		MO971	Outdoor Night Lighting
MO972	Street Lighting		MO972	Street Lighting
MO973	Traffic Signals		MO973	Traffic Signals

AQUILA NETWORKS - MPS ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL RATE REVENUE BY RATE CODE
AFTER TARIFF CONSOLIDATIONS / ELIMINATIONS
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30,2006)

		KWH SALES	RATE REVENUE
	Residential		
MO860	Residential General Use		
MO870	Residential w/ Space Heat		
MO815	Residential - Other Use		
	Total Residential	**2,706,211,099**	**$217,382,473**
	Small General Service		
MO710/711	Small GS - Secondary		
MO716	Small GS w/kW mtr, Pri		
MO728	SGS - Short-Term Service		
	Total Small GS	**770,286,445**	**$56,355,040**
	Large General Service		
MO720	Large GS, Secondary		
MO725	Large GS, Primary		
MO721	RTP (721)		
	Total Large GS	**855,620,103**	**$48,075,063**
	Large Power		
MO730	Large PS, Secondary		
MO735	Large PS, Primary		
MO731	RTP (731)		
MO737	RTP (737)		
	Large Power	**1,348,392,630**	**$62,396,708**
MO650	Thermal Energy Storage	**8,151,169**	**$382,954**
MONxx	Lighting	**44,565,552**	**$6,333,697**
	Unaccounted for	**1,000**	**-$128,219**
MO888	Interdepartmental	**342,000**	**$10,404**
Total MO $ from Permanent Rates		**5,733,569,999**	**$390,808,121**

AQUILA NETWORKS - L&P ELECTRIC
CASE NO. ER-2007-0004
ADJUSTED MISSOURI RETAIL RATE REVENUE BY RATE CODE
AFTER TARIFF CONSOLIDATIONS / ELIMINATIONS
(CALENDAR YEAR 2005, UPDATED THROUGH SEPTEMBER 30,2006)

		KWH SALES	RATE REVENUE
	Residential		
MO910/911	Residential - General Use		
MO915	Residential - Other Use		
MO916	Residential - Fixed Bill		
MO920/921	Residential - Space Heat		
MO922	Res - Sep Mtrd Space/Water Heat		
	Total Residential	**751,969,985**	**$46,977,070**
	Small General Service		
MO928	SGS - Short Term Service		
MO930	General Service - Limited Demand		
MO931	General Service - General Use		
MO941	Non-Res - Sep Mtrd Space/Water Heat		
	Total Small GS	**106,240,653**	**$8,354,627**
MO940	**Large General Service**	**399,858,064**	**$20,551,722**
MO944	**Large Power Service**	**732,810,080**	**$28,001,209**
	Lighting		
MOSJx	Street & Private Area Lighting		
MO971	Outdoor Night Lighting		
MO972	Street Lighting		
MO973	Traffic Signals		
	Total Lighting	**21,617,476**	**$2,473,557**
	Unaccounted for		($80,322)
	Interdepartmental	21,000	**$481**
Total MO $ from Permanent Rates		**2,012,517,258**	**$106,278,344**