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Missouri Public
Service Commission

EXECUTIVE SUMMARY
DIRECT TESTIMONY OF J. MATT TRACY
DOCKET NO. EO-2002-384

Exhibit No. 1
Case No(s) EO-2002-384
Date 11-07-05 Rptr 44

Section I: Introduction

This section provides the qualifications of the witness, the purpose of his testimony and recommendations for the Commission.

The purpose is to provide a general description of cost-of-service ("COS"), describe the process, describe the choice of the A&E-3CP demand allocator and introduce specimen tariff sheets.

The recommendations to the Commission include the following. Moving Aquila's electric rates significantly towards the results of Aquila's COS, endorsing Aquila's selection of the A&E-3CP method of demand allocation, approving the language of the specimen tariffs, and allowing for changes based on the potential sale of L&P.

Section II: Background and Purpose

This section provides a brief outline of the case history and the purpose for the case, namely to change the revenue collected from each customer class to reflect a more level rate of return including rate design changes to accomplish this.

Section III: COS General Description

This section describes the COS and how it is used in this proceeding.

Section IV: Move Towards COS Results

This section recommends moving beyond just collecting the correct total revenue from each customer class, to collecting the revenue based on the cost factors that caused them. The main point is to collect less of the customer and demand charges from energy, as that is inefficient and counterproductive.

Section V: Class Load Shapes

This section describes the creation of the class load shapes that were used by the parties to create their demand allocators. Schedule JMT-1, which lists the rate codes by class, is introduced in this section.

Section VI: Demand Allocation

This section describes demand allocation methods, and why Aquila's A&E-3CP method is most appropriate for allocating Production and Transmission expenses. Schedule JMT-2, which contains two graphs depicting the different demand allocators, is introduced in this section.

Section VII: Proposed Tariff Sheet Language

This section introduces the specimen tariff sheets, Schedule JMT-3, that implement the changes described in Aquila witness Gray's testimony. The rate design changes Aquila requests require language different from that currently in the tariff.

Section VIII: Changes if L&P is Sold

This section lists some of the changes to Aquila's proposals for L&P that may be needed in the event of the sale of that division. Fewer changes may be needed in that event.

Exhibit No.:
Issues: Policy, Class Loads,
Demand Allocation,
Specimen Tariffs
Witness: J. Matt Tracy
Sponsoring Party: Aquila Networks – L&P
Aquila Networks – MPS
Case No.: EO-2002-384

Before the Public Service Commission
Of the State of Missouri

Direct Testimony

Of

J. Matt Tracy

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DOCKET NO. EO-2002-384

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1 Q. What is the purpose of your testimony in this case before the Missouri Public Service
2 Commission ("Commission")?

3 A. My testimony will discuss the background of this case and its purpose; a general
4 description of a class cost-of-service study ("COS"); Aquila's recommendations and the
5 reasons to move towards Aquila's COS results, particularly for the residential classes;
6 the class load shapes used to develop the demand allocators for Aquila's COS; the
7 choice of demand allocator for most of the Production and Transmission functions; and
8 the specimen tariff sheets designed to implement the results of the COS. The tariff
9 sheets are not being presented for implementation in this case, but to provide the
10 Commission and all the parties with the form and text Aquila proposes to use when the
11 new rate structures are implemented. I will also discuss our preferences for which
12 changes to implement if Aquila Networks – L&P ("L&P") is sold.

13 Q. What are your recommendations?

14 A. Aquila recommends that the Commission:

- 15 • Move Aquila's electric rates significantly towards the results of Aquila's COS,
16 particularly with regard to customer and demand components for the
17 residential class.
- 18 • Support Aquila's selection of the A&E-3CP method of demand allocation for
19 Production and Transmission.
- 20 • Approve the language of the specimen tariffs, Schedule JMT-3, to implement
21 the rate structure changes proposed by Aquila.

- Allow Aquila some leeway in the changes for L&P based on the potential sale of that division.

SECTION II – Background and Purpose

Q. What is the background and purpose of this case?

A. A number of motions and orders in this case describe its beginnings and its purpose. My testimony will provide a brief outline of its beginning, dates of the technical conferences and other significant events, and then Aquila's view of its purpose.

Q. Please proceed.

A. This case was established as a "spin-off docket" based on the Commission's Ordered Paragraph No. 5 in its Order Approving Stipulation and Agreement in Case No. ER-2001-672, issued on February 21, 2002. Below is the timeline of technical conferences and other notable events which transpired thereafter.

9/18/02 Initial Technical Conference

3/4/03 Weather Normalization Conference

9/23/03 Weather Normalization Conference

11/12/03 Class Load Conference, at which Aquila class load shapes for data collected from 6/1/02 through 5/31/03 were reviewed. Collecting and analyzing this data consumed most of the time from the Commission's 2/21/02 Order until this date.

6/18/04 Aquila provided initial COS to all parties. Most of the time between the previous conference and this event was spent finding weather normalization of the load shapes that were acceptable to the parties.

1 4/18/05 Joint Response to Order Directing Filing proposing three technical
2 conferences

3 5/6/05 Conference in which Aquila presented an updated COS

4 6/17/05 Conference in which other parties were to present their COS results, at
5 which Commission Staff ("Staff") and the Sedalia Industrial Energy
6 Users Association ("SIEUA") presented COS studies

7 6/29/05 Billing Units Conference

8 8/19/05 Aquila provided billing units to all parties

9 Q. What is the ultimate purpose of this case from Aquila's standpoint?

10 A. This case was established to study, on a revenue neutral basis, Aquila's class cost-of-
11 service, to identify load characteristics and to develop revenue neutral shifts to
12 properly balance class rates. These revenue neutral shifts would then be implemented
13 in a subsequent rate proceeding (a revenue requirements case) and become the starting
14 point for further possible adjustments in that subsequent case.

15 Q. How does this compare to what goes on in a rate case?

16 A. This undertaking is different than a change in total company revenue which occurs in
17 a rate case. In this case, the final product is a design to change the revenue collected
18 from each class, without changing the total revenue collected by Aquila.

19 Q. Please summarize, then, what will happen in this case?

20 A. In this case, Aquila will first review the returns of the various rate classes, based on
21 COS results, and recommend changes to the revenue collected from each class to

1 reflect a more level rate of return for all the classes; and second, propose rate design
2 changes to meet the rate design goals described by Aquila witness Charles Gray.

3 SECTION III – COS General Description

4 Q. What is a COS?

5 A. A COS is a tool to help determine how much various groups of customers are
6 contributing to a utility company's revenue requirement. It is needed because the
7 majority of the equipment and labor a utility expends is not devoted to a single
8 customer. A company making a single product and selling it to a single customer has
9 a fairly straightforward task – it must collect all of its expenses, including a profit,
10 from the one customer. Most of the resources of an electric utility, however, whether
11 a generating station, a lineman, or a manager, provide service to many or all
12 customers. Determining a price for customers individually would be a monumental
13 task, costing more to complete than the value it would provide. As a consequence,
14 the customers are gathered into similar groups, or classes. Then all of the various
15 expenses are accumulated into similar functions, classified by the cause of the
16 expense, and allocated to classes of customers based on a variety of estimates. The
17 cause of expenses is limited to those items we can use to generate a bill: that the
18 customer exists – a customer charge; that the customer imposes a need for power on
19 the system – a demand charge; and that the customer consumes energy – an energy
20 charge. There are other charges, such as for reactive demand, or late payment, but
21 customer, demand, and energy charges account for the bulk of the expenses. Other
22 charges are generally included in COS studies in Other Revenue.

1 Q. How does a COS study fit into the purpose of this case?

2 A. A COS study is a best-effort estimate of revenue requirements by class. Some of the
3 classifications and allocations in it are subjective and open to argument. The load
4 research that serves as a foundation for the bulk of the demand allocations is itself
5 estimated, so contains a degree of uncertainty. The COS is a guide in setting revenue
6 requirements and designing rates, it is not a ruler. A COS follows the maxim about
7 being measured with a micrometer, marked with a piece of chalk, and cut with an axe.
8 However, it is the best information available. Any given number in it is as likely to
9 be too low as too high, which means the numbers determined by it are the best targets
10 available. Aquila's COS employs reasonable classifications and allocations, and is
11 well suited for use in this case. Aquila witness David Stowe addresses the detailed
12 creation of Aquila's COS in his direct testimony.

13 SECTION IV – Move Towards COS Results

14 Q. What changes in rates set themselves apart in Aquila's proposal?

15 A. Aquila witness Gray addresses the changes in Aquila's rate structures, but the
16 philosophical shift we are proposing is a decrease in the recovery of customer and
17 demand costs through the variable energy charge. This is probably most pronounced
18 in the residential classes, where the fixed charge has been much lower than the cost.

19 Q. What are the effects of the current philosophy, as reflected in existing tariffs, where
20 the customer charge is kept at a level much lower than cost, and energy charges are
21 raised to collect the remainder?

1 A. The first effect is that for which it was presumably intended – it reduces the bills of
2 low-use customers. The second effect is that it encourages conservation by raising the
3 cost of consumption at the margin. That is, the next unit of electricity costs the
4 consumer more than it costs Aquila to generate, thus encouraging the customer to find
5 ways to reduce energy consumption.

6 Q. Are there undesirable aspects to the reduced bill to low-use customer effect?

7 A. Yes. To lower the bills of low-use customers, the bills of high-use customers are
8 raised. Aquila found in reviewing its Colorado customers that those customers
9 receiving LIHEAP assistance actually used more energy than average, not less. In
10 that circumstance, lowering the cost to low-use customers actually increased the cost
11 to those in need of assistance. To the extent that other customers provide the
12 assistance funds, they have to provide more than they would if all customers were
13 paying energy rates that included less of the fixed costs.

14 Q. Are there undesirable aspects to the conservation effect?

15 A. Yes. By raising the marginal cost of consumption of electricity, the price signal to
16 consumers is distorted. Those who can afford to buy more energy-efficient homes
17 and appliances will spend more on those goods than is warranted by the cost to
18 society. That will reduce their use of electricity, while raising the relative use of those
19 who cannot afford newer, more energy-efficient homes and appliances. The reduced
20 consumption of electricity will impact Aquila's ability to collect its fixed costs,
21 requiring Aquila to return for a rate increase. If the increase is again distributed
22 largely to the energy charges, rather than the customer charge, then the distortion of

1 the energy price is amplified. That leads to another round of energy savings by those
2 who can afford the capital investment in more efficient goods, under-recovery of
3 revenue requirement by Aquila, and so on. All of this drives up the cost of electricity
4 to those customers least able to afford it.

5 Q. Does collecting much of the fixed customer and demand costs in the variable cost of
6 energy increase the frequency of rate cases?

7 A. Yes. My answer above gives the scenario for variable energy efficiency changes in
8 the customer population, but a similar scenario plays out if average use-per-customer
9 changes, either up or down. To the extent that fixed costs are being collected from
10 variable energy, and consumers change the amount of energy they use, then fixed
11 costs will either be over- or under-recovered. Keeping the fixed and variable charges
12 close to their respective costs minimizes the impact on Aquila of changes in consumer
13 consumption patterns. I need to note that a number of other variables come into play
14 for any of the parties in determining when to file for a revenue change, and in any
15 given scenario this one may not be the most important. However, all else being equal,
16 raising the customer charge much closer to its cost will reduce the need for rate cases,
17 thereby lowering the cost to consumers by reducing rate case expenses, freeing up
18 resources of Staff and other parties for other needs, all while protecting the consumer
19 and helping stabilize rates.

20 SECTION V – Class Load Shapes

21 Q. What is the purpose of creating class load shapes?

1 A. The class load shapes are used in creating demand allocators for the COS to assign costs
2 to the various classes. Aquila witness Stowe will address this topic in his direct
3 testimony. Class load shape information is not available from data collected in the
4 routine billing of customers, so is estimated based on samples drawn from classes of
5 customers. The sample customers have recording demand meters that track use for the
6 customer in 15-minute increments, allowing for the creation of hourly load shapes,
7 rather than just monthly total kWh available with the typical meter reading done for
8 billing purposes.

9 Q. Were the load shapes estimated using methods generally accepted within the industry?

10 A. Yes, they were. In this case in particular, the parties to the case were kept informed of
11 the development of the load shapes. Staff and Aquila personnel then worked to take the
12 initial load shapes and normalize them for weather. The final load shapes were
13 provided to all parties then participating, and all agreed they were acceptable, or at least
14 none objected to them.

15 Q. For what classes of customers did you provide estimated load shapes?

16 A. Attached to my testimony is Schedule JMT-1 listing the classes and the rate codes in
17 each class.

18 Q. How were the load shapes estimated?

19 A. The classes with many customers used a combined-ratio estimator ("CRE"). The
20 classes with fewer customers generally used a census estimate grossed up for missing
21 data with a CRE. The Lights and MO800 load shapes were calculated from other
22 information.

1 Q. How was the Lights load estimated?

2 A. The Lights load started with sunrise and sunset times from the U.S. Naval Observatory's
3 Astronomical Applications Department, <http://aa.usno.navy.mil/>. Times for St. Joseph,
4 Missouri, were used for L&P. Times for Lone Jack, Missouri, were used for Aquila
5 Networks – MPS (“MPS”). Based on those times, daylight hours were given a value of
6 zero, nighttime hours were given a value of one, with the hours including sunrise or
7 sunset prorated based on the time of the rise or set. The annual sum of those values is
8 near 4380, or half of the 8760 hours in a 365 day year. The ratio of annual billed kWh
9 to 4380 is then multiplied times each hour to create the estimated load. The months
10 nearer the summer solstice have fewer hours of darkness, and those near the winter
11 solstice have more. This can be significant because a system peak time of 18:00 during
12 the summer would result in no contribution from the lighting class, but an 18:00 system
13 peak is after dark in the winter, resulting in a contribution to peak by the lighting class.

14 Q. How was the MO800 class load estimated?

15 A. The MO800 class was estimated last. The sum of the load shapes of the previously
16 estimated classes was reduced by the ratio of the MO800 kWh to the kWh in the
17 summed load shape. The MO800 class includes three rates: MO800 – Municipal
18 Water Pumping and Special Street Lighting; MO810 – Municipal Parks and Recreation,
19 single-phase; and MO811 – Municipal Parks and Recreation, three-phase.

20 SECTION VI – Demand Allocation

21 Q. Is there only one method to allocate demand costs?

22 A. No. There are a number of methods.

1 Q. Did Aquila use only one method to allocate demand costs in its COS?

2 A. No. Several demand allocators were used. Various methods are generally accepted
3 for different functions within the COS. While I will discuss several methods, the
4 main purpose of my discussion of demand allocation is to show why we chose the
5 A&E-3CP method to allocate the demand component of most of the Production and
6 Transmission functions.

7 Q. What methods are available to allocate the demand component of costs?

8 A. I am not prepared to provide a comprehensive list, but believe that the following are a
9 representative group: non-coincident peak ("NCP"), single coincident peak ("1-CP"),
10 average of three coincident peaks ("3-CP"), average of four coincident peaks ("4-
11 CP"), average of twelve coincident peaks ("12-CP"), average and excess ("A&E"),
12 peak and average ("P&A"), and average annual demand ("ENERGY").

13 Q. What are the basics of the calculations for these methods?

14 A. For most of these, I will describe the numerator used in the ratio. The denominator is
15 the sum of the class numerators for that method.

16 For NCP, it is the sum of the individual customer maximum demands for a class.

17 This is normally the limiting case on one end of the spectrum of possible demand
18 allocators.

19 For 1-CP, it is the class contribution to the system at the time of the system's annual
20 peak.

1 For 3-CP and 4-CP, it is the average of the class contributions to the system's three or
2 four highest monthly peaks. In Missouri, these are typically summer months,
3 generally June through September.

4 For 12-CP, it is the average of the class contributions to the system's twelve monthly
5 peaks.

6 Both A&E and P&A use energy weighted by the system load factor, plus one of the
7 other demands weighted by one minus the system load factor.

8 For ENERGY, it is the annual usage of the class. I include this in a discussion of
9 demand allocation because it is the limiting case on the other end of demand
10 allocators from NCP, as energy is the load-weighted average demand for all hours in
11 the year.

12 Q. Are there variations on these allocators?

13 A. Yes. In addition to non-coincident demands and coincident demands, there are class
14 demands. Class demand is the maximum coincident demand for a class of customers,
15 regardless of the time the system peaked. NCP can be calculated on an annual basis,
16 which is perhaps most representative of its intent, or on a monthly basis, which is
17 much simpler to calculate, as data is collected month by month. The A&E and P&A
18 methods can both use various other demands for the excess or peak portion.

19 Q. Do the different demand allocation methods have different impacts on the classes?

20 A. Yes. Classes with high load factors are impacted opposite to those with low load
21 factors. The class with the highest load factor for both L&P and MPS is Large Power

1 Service ("LPS"), and the class with the lowest load factor is residential ("RES"). The
2 different impact is easily seen in graphs, which are provided in Schedule JMT-2.

3 Q. What does Schedule JMT-2 show?

4 A. Schedule JMT-2 shows two bar graphs, one for L&P and the other for MPS. The
5 graphs represent the values of various demand allocations shown across the lower
6 front of the graph, to the classes shown along the lower right of the graph. The sum
7 of the classes in each graph for any one allocation method is 100%. The classes are
8 sorted from front to back with the tallest in back, to facilitate viewing, and sorted
9 from left to right from lowest to highest allocation for RES.

10 Q. What did you find most notable in reviewing the graphs?

11 A. First, that LPS's allocation goes down as RES's allocation goes up. This is the
12 expected result from the two classes with the most extreme load factors. The
13 ENERGY allocator is the worst for the LPS class, which uses energy most efficiently
14 as measured by its load factor, and best for the RES class. The complement is true for
15 the NCP allocator, with it being best for the LPS class, and worst for RES.
16 Second, that for both L&P and MPS, the RES class is the largest. Note that the RES
17 class is particularly dominant for MPS.
18 Third, that there are a number of allocation methods that produce very similar results.
19 For L&P, those are A&E-3CP, 3-CP, 12-CP, and 4-CP. For MPS, those are 4-CP,
20 A&E-3CP, and 3-CP.
21 Fourth, that the Staff's demand allocation method is very close to the ENERGY
22 allocator.

1 Fifth, even though for L&P the Staff method ranks next to the A&E-3CP method,
2 which is what Aquila used to allocate most of its demand for the Production and
3 Transmission functions, if one looks at the difference between the heights of the LPS
4 and RES bars for Staff, versus the similar bars for A&E-3CP, one sees a notable
5 difference, even though the LGS allocation is similar for the two methods.
6 Sixth, the 1-CP, 3-CP, and 4-CP allocation methods do not allocate any demand to
7 LIGHTS, because LIGHTS are not on during the peaks used to calculate those
8 methods. I included the LIGHTS class for MPS to show this phenomenon. This is
9 one of the reasons we chose A&E-3CP, rather than a 3-CP or 4-CP allocator. Our
10 method allocates some demand to LIGHTS. It is also noteworthy that except for
11 Staff's method, all of the remaining demand allocators for LIGHTS are either zero, or
12 about half the level of ENERGY. Staff's method actually allocates about 5% more
13 than the ENERGY method to LIGHTS.

14 Q. What impact did these observations have on your choice of allocator?

15 A. The first clear need was for an allocator that was balanced in its allocation of costs
16 between high and low load factor customers. RES loads dominate both L&P and
17 MPS, but particularly MPS. An allocator that is less biased towards ENERGY will
18 encourage more efficient use of facilities. By rebalancing towards NCP there is a
19 better opportunity for high load factor customers to enter, or expand in Aquila's
20 territory. Increasing the proportion of those types of customers in the current mix will
21 help reduce costs for everyone as existing facilities are used at a higher overall load
22 factor. Using an allocator that leans more towards ENERGY, such as Staff's,

1 discourages the expansion of high load factor customers. So relative to Aquila's
2 A&E-3CP method, Staff's allocator will tend to decrease the overall load factor,
3 raising the cost of providing service on the system to everyone.

4 The second impact was seeing that a number of allocators produce similar results. As
5 mentioned above, we wanted to see some allocation of demand to LIGHTS. To the
6 extent we felt the group of similar methods displayed an overall allocation that we
7 believed was fair, we chose one that included an allocation to LIGHTS.

8 Q. What is the value of the A&E-3CP method of demand allocation for Production and
9 Transmission functions?

10 A. The A&E-3CP method takes several perspectives into consideration. It recognizes
11 the significance of the summer peaks to the overall cost of building the system. It
12 notes that all classes use the system regardless of the time of their peak. And it sees
13 the value to the entire system of having diversity between classes – it costs less to
14 serve the sum of the diverse loads than would be needed to serve each of the loads
15 separately.

16 SECTION VII – Proposed Tariff Sheet Language

17 Q. Do you have new tariff sheets for review?

18 A. Yes. Schedule JMT-3 consists of specimen tariff sheets containing language to
19 implement the rate structure changes we are requesting.

20 Q. Are you submitting these tariff sheets for approval in this docket?

21 A. No. This is not an appropriate docket to submit, or approve tariff sheets. The
22 purpose of the tariff sheets in Schedule JMT-3 is to provide the Commission and

1 other parties with the language we propose to implement the new rate structures. The
2 changes to existing rates are in more than just rate values, so the language on the
3 existing tariff sheets must be changed to reflect the new structure.

4 Q. Are the rate values in Schedule JMT-3 to be relied upon?

5 A. No. The rate values we are proposing are provided by Aquila witness Gray. The
6 values in Schedule JMT-3 may be the same, but the purpose of the schedule is to
7 provide the language, not the values.

8 Q. Are there changes to the tariffs that are not described in Aquila witness Gray's
9 testimony?

10 A. Yes, there are two. First, we are standardizing the language between L&P and MPS.
11 As part of trying to have similar rate structures for the two divisions, we want the
12 language to be the same to the extent possible. Second, we added language about
13 Web Usage Service to the LPS rates. All LPS customers have metering in place that
14 can be accessed remotely and interrogated to show usage. This language places the
15 charges for customers to access the information from their meters via an Internet
16 service into the tariff. The charges recover the cost of the service, and reflect the cost
17 of additional phone calls to the meter as more readings are needed throughout a day.

18 Q. Do you have a detailed description of the changes from the existing tariffs that are
19 contained in the specimen tariffs which make up Schedule JMT-3?

20 A. No. The changes are largely described in the direct testimony of Aquila witness Gray,
21 but the changes are so widespread that we believe they are more easily reviewed by

1 looking through the tariffs, rather than attempting a word-by-word explanation of
2 changes.

3 SECTION VIII – Changes if L&P is Sold

4 Q. Will your recommended changes for L&P differ if an announcement of its sale is
5 made before the end of this docket?

6 A. Yes. If a sale is announced, we will limit the changes for L&P. This will be partially
7 in deference to the preferences of the potential buyer, and also to reduce the changes
8 to L&P customers. If the potential buyer wants to change the rate structure for L&P
9 to match its existing rates, it seems unnecessary to switch those customers to a new
10 rate structure in the interim.

11 Q. What are the minimum changes you would still want for the L&P tariffs?

12 A. The minimum change out of this docket would be adjusting the rate levels of the
13 various classes to better account for the COS results. We would like to have a
14 percentage increase or decrease by which to multiply each of the rate values for each
15 class.

16 Q. Are there additional changes you would recommend for the L&P tariffs?

17 A. Yes. Again, while we would tend to defer to the potential buyer, some changes seem
18 warranted. For example, there are a few separate tariff sheets for L&P that have the
19 same structure, and the same rate values. We would like to consolidate those. We
20 would also consider incorporating the Primary Discount Rider into the LGS and LPS
21 rates, such that there would be secondary and primary voltage rates for LGS and LPS.

1 The value of these changes is largely administrative, making it simpler to identify
2 and summarize similar customers.

3 Q. Is there a chance Aquila would want to implement all of the changes for L&P, even if
4 a sale is announced?

5 A. Yes. There is a chance that either at the request of a potential buyer, or otherwise, we
6 may want to proceed with implementing all of the changes as if L&P were not being
7 sold.

8 Q. Are you making a recommendation as to the course of action for the Commission in
9 the event of an announced sale of L&P during this proceeding?

10 A. No. We are going forward as if there is no sale pending, and that L&P will continue
11 as a part of Aquila indefinitely.

12 Q. Does this conclude your direct testimony?

13 A. Yes it does.

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

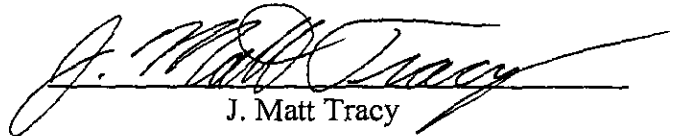
In the matter of an Examination of Class Cost of Service)
And Rate Design in the Missouri Jurisdictional Electric)
Service Operations of Aquila, Inc., formerly known as)
UtiliCorp United Inc.)

Case No. EO-2002-384


County of Jackson)
)
State of Missouri) ss

AFFIDAVIT OF J. MATT TRACY

J. Matt Tracy, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Direct Testimony of J. Matt Tracy;" that said testimony was prepared by him and under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge, information, and belief.


J. Matt Tracy

Subscribed and sworn to before me this 16TH day of SEPTEMBER, 2005.



Notary Public
MARVIN L. FRIEDRICH

My Commission expires:

March 10, 2007

Rate Codes in Each Load Research Class

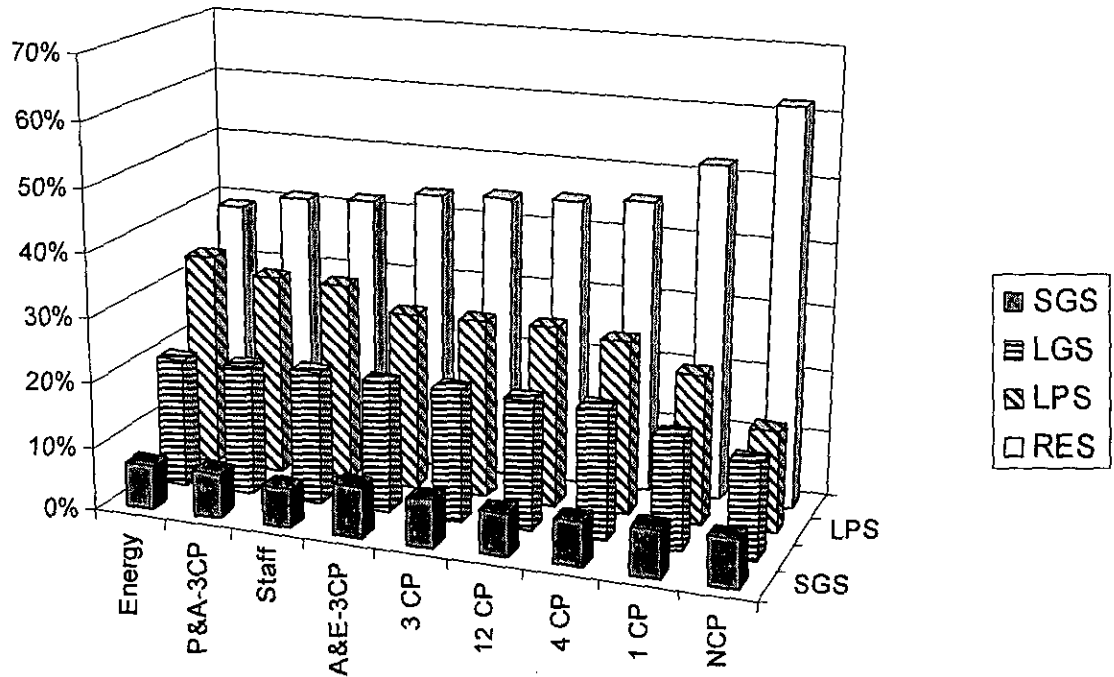
Aquila Networks – L&P

Class	Description	Rates
Res-Gen	Residential, General Use	MO910, MO911, MO915
Res-H2O	Residential, Water Heating	MO913, MO914
Res-Heat	Residential, Space Heating	MO920, MO921, MO922
Sgs-NonkW	Small General Service, Non-demand	MO930, MO932, MO934, MO941
Sgs-kW	Small General Service, Demand	MO931, MO933
Lgs-S	Large General Service, Secondary	MO940 - subset
Lgs-P	Large General Service, Primary	MO940 - subset
Lps-S	Large Power Service, Secondary	MO944 - subset
Lps-P	Large Power Service, Primary	MO944 - subset
Lights	Street and Private Area Lighting	All Lighting Rates

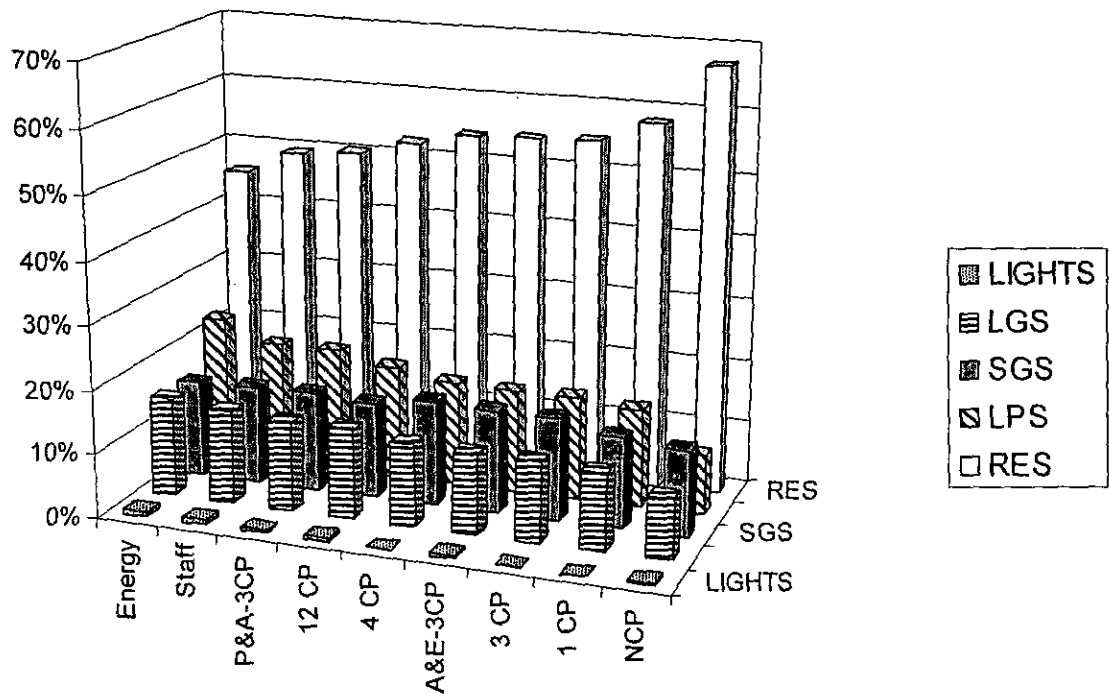
Aquila Networks – MPS

Class	Description	Rates
Res-Gen	Residential, General Use	MO860
Res-Sh	Residential, Space Heating	MO870
Sgs-SNonkW	Small General Service, Secondary, Non-demand	MO710
Sgs-SkW	Small General Service, Secondary, Demand	MO711
Sgs-P	Small General Service, Primary, Demand	MO716, MO745
Lgs-S	Large General Service, Secondary	MO720, MO721
Lgs-P	Large General Service, Primary	MO725 - subset
Lgs-SF	Large General Service, Primary, St. Fair	MO725 - subset
Lps-S	Large Power Service, Secondary	MO730, MO731
Lps-P	Large Power Service, Primary	MO735, MO737
S&C	Schools & Churches	MO740
Muni-WPR	Municipal Water Pumping, Parks & Rec.	MO800, MO810, MO811
Therm	Thermal Energy Storage	MO650
Modine	Modine Manufacturing	MO919
Lights	Street and Private Area Lighting	All Lighting Rates

Aquila Networks - L&P Demand Allocators



Aquila Networks - MPS Demand Allocators



Schedule JMT-3
Docket No. EO-2002-384

SPECIMEN TARIFF SHEETS
Sheets 1 – 28

Aquila, Inc., dba

AQUILA NETWORKS

KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – L&P

RESIDENTIAL SERVICE ELECTRIC

AVAILABILITY

This schedule is available to single family residences, individually metered living units in multiple occupancy buildings, and private rooming houses for all residential uses of electric service including lighting, cooking, house heating, water heating, refrigeration, air conditioning, household appliances, and ordinary domestic uses. The maximum size motor permitted on this rate schedule is ten (10) horsepower. This rate schedule is for single-phase service.

A "residential" ("domestic") customer under this residential rate classification is a customer who purchases electricity for "domestic use." "Domestic use" under this rate classification includes that portion of electricity that is ultimately consumed at a single-family or individually metered multiple-family dwelling, and shall apply to all such purchases regardless of whether the customer is the ultimate consumer.

This schedule is intended to satisfy the provisions of Section 144.030(23) RSMo by establishing and maintaining a system and rate classification of "residential" to cause the residential sales and purchases of electricity under this rate schedule to be considered as sales for domestic use.

Where a portion of a residence unit is used for non-residential purposes, the appropriate general service schedule is applicable to all service. However, if the wiring is arranged so that the service for residential purposes and for non-residential purposes can be metered separately, this schedule will be applied to the residential service. Service to hotels, recognized rooming or boarding houses or to the halls, basement or other common use portions of an apartment building will not be supplied under this schedule.

MONTHLY RATE FOR RESIDENTIAL GENERAL USE, MO910

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$10.00 per month	\$10.00 per month
Energy Charge		
For the first 600 kWh's	\$0.0600 per kWh	\$0.0600 per kWh
For the next 400 kWh's	\$0.0650 per kWh	\$0.0490 per kWh
For all over 1,000 kWh's	\$0.0700 per kWh	\$0.0490 per kWh

In addition to the above charges, Interim Energy Charge IEC-E will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

When a multiple occupancy building or project is served through one (1) meter, then for billing purposes, the kilowatt-hours in each of the blocks and the service charge of the above schedule shall be multiplied by the number of dwelling units served. A rooming house may be served on this schedule when each of the separate living quarters within the rooming house is considered as a unit. MO911

P.S.C. MO. No. 1Original Sheet No. 2

Canceling P.S.C. MO. No. _____

Sheet No. _____

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RESIDENTIAL SERVICE (Continued) ELECTRIC

MONTHLY RATE FOR RESIDENTIAL ELECTRIC SPACE HEATING, MO920

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$15.00 per month	\$15.00 per month
Energy Charge		
For the first 600 kWh's	\$0.0600 per kWh	\$0.0600 per kWh
For the next 400 kWh's	\$0.0650 per kWh	\$0.0380 per kWh
For all over 1,000 kWh's	\$0.0700 per kWh	\$0.0220 per kWh

In addition to the above charges, Interim Energy Charge IEC-E will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This rate applies to residential customers (MO920) when electric space heating has been permanently installed as the primary source of heat and able to provide whole house heating.

Space heating equipment shall consist of permanently installed electric heating equipment of a size and design approved by the Company. Primary heating source is defined as the system capable of being the sole source of heat during the majority of the heating season. Whole house heating is defined as the distribution of controlled heat throughout the private dwelling unit.

When a multiple occupancy building or project is served through one (1) meter, then for billing purposes, the kilowatt-hours in each of the blocks and the service charge of the above schedule shall be multiplied by the number of dwelling units served. A rooming house may be served on this schedule when each of the separate living quarters within the rooming house is considered as a unit. MO921

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Issued by: Gary Clemens, Regulatory Services

Effective:

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RESIDENTIAL SERVICE (Continued) ELECTRIC

MONTHLY RATE FOR RESIDENTIAL OTHER USE, MO915

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$10.00 per month	\$10.00 per month
Energy Charge		
For all kWh's	\$0.0700 per kWh	\$0.0600 per kWh

In addition to the above charges, Interim Energy Charge IEC-E will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This rate applies to residential customers (MO915) who do not qualify under any other residential rate.

Customers qualifying for this rate will generally be those with well pumps, barns, machine sheds, detached garages and home workshops, whose meter is not connected to a single or multiple occupancy dwelling unit. This rate schedule cannot be used for any commercial or industrial customer.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge.

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

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**RESIDENTIAL SPACE HEATING / WATER HEATING - SEPARATE METER
ELECTRIC****AVAILABILITY**

Available for electric space heating and/or electric water heating service to any residential customer receiving service at the same location on a residential schedule. This schedule is not available for new installations as of June 15, 1995.

MONTHLY RATE, MO922

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$7.91 per month	\$7.91 per month
Energy Charge		
For all kWh's	\$0.0600 per kWh	\$0.0220 per kWh

In addition to the above charges, Interim Energy Charge IEC-E will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge.

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

Service shall be through a separate meter. No equipment, other than space heating, electrically driven refrigeration type air conditioning and/or water heating, will be served through this meter.

Space heating equipment shall consist of at least three (3) kW input rating of permanently installed electric heating equipment used as the sole source of heat in the space served. All space heating equipment must be of a size and design approved by the Company.

Water heaters served under this schedule must be permanently installed, and of a size and design approved by the Company.

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P.S.C. MO. No. 1Original Sheet No. 5

Canceling P.S.C. MO. No. _____

Sheet No. _____

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SMALL GENERAL SERVICE (SGS) ELECTRIC

AVAILABILITY

This schedule is available for general service use. This includes lighting, power or combined lighting and power service. Customers receiving service at more than one (1) voltage level will be treated as multiple customers for billing purposes.

This schedule is not available for standby, breakdown, supplementary, interruptible, maintenance or resale service.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company's secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 8,320, 12,470, 13,800 or 24,900 nominal volts. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE FOR SGS NON DEMAND BILLING, MO930

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$13.84 per month	\$13.84 per month
Energy Charge		
For the first 1,000 kWh's.....	\$0.0600 per kWh	\$0.0600 per kWh
For the next 4,400 kWh's.....	\$0.0650 per kWh	\$0.0530 per kWh
For all over 5,400 kWh's.....	\$0.0700 per kWh	\$0.0530 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

Customers receiving service under this rate (MO930) will generally not have a demand meter. When energy usage of the customer exceeds five thousand four hundred (5,400) kWh per month or Company has reason to believe that the customer's demand exceeds thirty (30) kW regardless of the energy usage, Company shall install a demand meter. A customer may request and Company shall install a demand meter regardless of the customer's energy usage, if customer has reason to believe that their energy usage exceeds one hundred eighty (180) hours of use.

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SMALL GENERAL SERVICE (SGS) (Continued) ELECTRIC

MONTHLY RATE FOR SGS DEMAND BILLING, MO931

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$38.42 per month	\$38.42 per month
Demand Charge	\$4.25 per kW	\$2.26 per kW
Energy Charge		
First 180 hours of use	\$0.0360 per kWh	\$0.0360 per kWh
Over 180 hours of use	\$0.0280 per kWh	\$0.0280 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

Customers receiving service under this rate (MO931) must have a demand meter installed.

MONTHLY RATE FOR SGS SHORT TERM SERVICE, MO928

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$13.84 per month	\$13.84 per month
Energy Charge		
For all kWh's	\$0.0650 per kWh	\$0.0530 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This short term service rate is designed for service supplied for less than twelve (12) months at one (1) point of delivery and measured through one (1) meter. Service will be furnished only when and where Company has available capacity in lines, transformers and ancillary equipment.

Customers receiving service under this rate (MO928) will generally be special events including carnivals, circuses, fairs, and/or festivals. In addition this rate will be applied to builders, contractors, and/or developers' constructing residential, commercial or industrial sites prior to occupancy and/or a permanent meter is set.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

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P.S.C. MO. No. 1Original Sheet No. 7

Canceling P.S.C. MO. No. _____

Sheet No. _____

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SMALL GENERAL SERVICE (SGS) (Continued) ELECTRIC

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge plus the monthly demand charge if applicable.

BILLING DEMAND

The billed demand shall be the maximum fifteen (15)-minute demand, measured during the current billing period.

HOURS OF USE

The kWh of energy usage per kW of billed demand, (kWh ÷ billed kW).

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

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<p align="center">NON-RESIDENTIAL SPACE HEATING / WATER HEATING – SEPARATE METER ELECTRIC</p>
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AVAILABILITY

Available for either electric space heating and/or electric water heating service to any non-residential customer receiving service at the same location on a non-residential rate schedule. This schedule is not available for new installations as of June 15, 1995.

MONTHLY RATE, MO941

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$7.20 per month	\$7.20 per month
Energy Charge		
For all kWh's	\$0.0600 per kWh	\$0.0530 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge.

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

Service shall be through a separate meter. No equipment, other than space heating and/or water heating, will be served through this meter.

Space heating equipment shall consist of at least three (3) kW input rating of permanently installed electric heating equipment used as the sole source of heat in the space served. All space heating equipment must be of a size and design approved by the Company.

Water heaters served under this schedule must be permanently installed, and of a size and design approved by the Company.

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Issued by: Gary Clemens, Regulatory Services

Effective:

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LARGE GENERAL SERVICE (LGS) ELECTRIC

AVAILABILITY

This schedule is available for general service use. This includes lighting, power or combined lighting and power service. All service will be provided through one (1) (set of) compound watt-hour and demand meter(s) for each delivery point. A delivery point is defined as the point of metering from which the customer receives service from Company's secondary or primary distribution system. Customers receiving service at more than one (1) voltage level will be treated as multiple customers for billing purposes.

This schedule is not available for standby, breakdown, supplementary, interruptible, maintenance or resale service.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company's secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 8,320, 12,470, 13,800 or 24,900 nominal volts. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE FOR LGS AT SECONDARY VOLTAGE, MO940

	Summer	Winter
Customer Charge	\$54.00 per month	\$54.00 per month
Demand Charge	\$7.47 per kW	\$5.00 per kW
Energy Charge		
First 180 hours of use.....	\$0.0240 per kWh	\$0.0240 per kWh
Next 180 hours of use	\$0.0220 per kWh	\$0.0220 per kWh
Over 360 hours of use	\$0.0200 per kWh	\$0.0200 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

P.S.C. MO. No. 1Original Sheet No. 10

Canceling P.S.C. MO. No. _____

Sheet No. _____

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<p style="text-align: center;">LARGE GENERAL SERVICE (LGS) (Continued) ELECTRIC</p>

MONTHLY RATE FOR LGS AT PRIMARY VOLTAGE, MO943

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$140.50 per month	\$140.50 per month
Demand Charge	\$7.28 per kW	\$4.88 per kW
Energy Charge		
First 180 hours of use	\$0.0234 per kWh	\$0.0234 per kWh
Next 180 hours of use	\$0.0215 per kWh	\$0.0215 per kWh
Over 360 hours of use	\$0.0195 per kWh	\$0.0195 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

BILLING DEMAND

The billed demand shall be the maximum fifteen (15)-minute demand, measured during the current billing period; or seventy-five percent (75%) of the highest maximum kW actual demand in the previous eleven (11) months; or one hundred (100) kW, whichever is greatest.

HOURS OF USE

The kWh of energy usage per kW of actual demand, (kWh ÷ actual kW).

ACTUAL DEMAND

The actual demand shall be the maximum fifteen (15) minute demand measured during the current billing period.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge plus the monthly demand charge.

LARGE GENERAL SERVICE (LGS) (Continued) ELECTRIC

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

METERING LOSS ADJUSTMENT

Where service is metered at a voltage level other than secondary, an adjustment to both the kilowatt-hour (kWh) and kilowatt (kW) readings will be made as follows:

1. **Service Metered at Primary Voltage**
Where service is provided directly from a twelve (12) kV circuit feeder and is metered at four (4) kV or twelve (12) kV, the metered kWh and kW will be reduced by one and one-half percent (1.5%).
2. **Service Metered at Substation Voltage**
Where service is metered at four (4) kV or twelve (12) kV directly from a substation, the metered kWh and kW will be reduced by two and one-half percent (2.5%).
3. **Service Metered at Transmission Voltage**
Where service is metered at thirty-four (34) kV and above directly from a transmission line, the metered kWh and kW will be reduced by three percent (3%).

If the customer's meter has to be relocated in order for the customer to become eligible for the metering loss adjustment, all costs associated with the relocation shall be paid by the customer.

This adjustment only applies to customers served at secondary voltage, MO940.

This Meter Loss Adjustment is no longer available to new installations as of the effective date of this tariff.

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<p style="text-align: center;">LARGE POWER SERVICE (LPS) ELECTRIC</p>

AVAILABILITY

This schedule is available for all nonresidential use. All service will be provided through one (1) (set of) compound watt-hour and demand meter(s) for each delivery point. A delivery point is defined as the point of metering from which the customer receives service from Company's secondary or primary distribution system. Customers receiving service at more than one (1) voltage level will be treated as multiple customers for billing purposes.

This schedule is not available for standby, breakdown, supplementary, interruptible, maintenance or resale service.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company's secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 8,320, 12,470, 13,800 or 24,900 nominal volts. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE FOR LPS AT SECONDARY VOLTAGE MO944

	<u>Summer</u>	<u>Winter</u>
Facilities kW Charge		
For the first five hundred (500)		
Facilities kW,	\$650.00 per month	\$650.00 per month
For all over five hundred (500)		
Facilities kW	\$1.10 per kW	\$1.10 per kW
Demand Charge		
for each kW	\$6.74 per kW	
for each kW:		
less than or equal to Previous Summer Peak kW	\$3.32 per kW	
for each kW over Previous Summer Peak kW	\$0.27 per kW	
Energy Charge		
for each "on-peak" kWh	\$0.0330 per kWh	\$0.0270 per kWh
for each "off-peak" kWh	\$0.0250 per kWh	\$0.0220 per kWh

In addition to the above charges, Interim Energy Charge IEC-F will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

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<p align="center">LARGE POWER SERVICE (LPS) (Continued) ELECTRIC</p>
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MONTHLY RATE FOR LPS AT PRIMARY VOLTAGE MO945

	<u>Summer</u>	<u>Winter</u>
Facilities kW Charge		
For the first five hundred (500)		
Facilities kW,	\$650.00 per month	\$650.00 per month
For all over five hundred (500)		
Facilities kW	\$1.10 per kW	\$1.10 per kW
Demand Charge		
for each kW	\$6.57 per kW	
for each kW:		
less than or equal to Previous Summer Peak kW	\$3.24 per kW	
for each kW over Previous Summer Peak kW	\$0.27 per kW	
Energy Charge		
for each "on-peak" kWh.....	\$0.0322 per kWh	\$0.0263 per kWh
for each "off-peak" kWh.....	\$0.0243 per kWh	\$0.0214 per kWh

In addition to the above charges, Interim Energy Charge IEC-F will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

DEMAND DETERMINATIONSFacilities kW

The Facilities kW shall be determined by a comparison of the Actual kW in the current billing period and the Actual kW as recorded in each of the previous eleven (11) billing periods. If there are less than eleven (11) previous billing periods, the determination will be made using all available previous billing periods. The Facilities kW is defined as the maximum Actual kW as determined from the comparison but in no case less than five hundred (500) kW for Facilities kW Charge billing purposes.

As an example, if the current billing period's Actual kW is one thousand (1,000) kW and the single highest Actual kW recorded in any of the previous eleven (11) billing periods is one thousand two hundred (1,200) kW, then the facilities kW to be used in the current billing would be one thousand two hundred (1,200) kW. The Facilities kW Charge would be \$650.00 + ((1200 - 500) x \$1.10) = \$1,420.00 for the current billing period.

P.S.C. MO. No. 1Original Sheet No. 14

Canceling P.S.C. MO. No. _____

Sheet No. _____

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For Territory Served by Aquila Networks – L&P

KANSAS CITY, MO 64138

<p style="text-align: center;">LARGE POWER SERVICE (LPS) (Continued) ELECTRIC</p>

DEMAND DETERMINATIONS (Continued):Billed Demand

The billed demand shall be the greater of:

- 1) the maximum fifteen (15) minute "on-peak" demand measured during the current billing period
- or
- 2) fifty percent (50%) of the maximum fifteen (15) minute "off-peak" demand measured during the current billing period.

The Billed Demand in no case shall be less than five hundred (500) kW.

Previous Summer Peak kW

The Previous Summer Peak kW shall be the greater of:

- 1) the maximum fifteen (15) minute "on-peak" demand measured during the most recent billing months of July, August, and September
- or
- 2) fifty percent (50%) of the maximum fifteen (15) minute "off-peak" demand measured during the most recent billing months of July, August, and September.

The Previous Summer Peak kW in no case shall be less than five hundred (500) kW.

The Previous Summer Peak kW, once established, shall be used for the billing periods of October through May immediately following the most recent summer period.

BILLING PERIODS

	<u>Summer</u>	<u>Winter</u>
<u>Weekdays (except holidays)</u>		
On-peak	10 a.m. - 10 p.m.	7 a.m. - 10 p.m.
Off-peak	10 p.m. - 10 a.m.	10 p.m. - 7 a.m.
<u>Weekends, holidays</u>		
Off-peak	all hours	all hours

All times listed are Central Standard Time or, when in effect, Central Daylight Savings Time. Holidays are defined as New Year's Day, Memorial Day observed, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

WEB USAGE SERVICE

Customers served under this LPS rate schedule are eligible for basic monthly web usage service which includes web access to their usage for fifteen (15) minute interval data which is updated once per month. If the customer desires to upgrade their web usage service then an additional monthly fee may apply.

Aquila, Inc., dba

AQUILA NETWORKS

KANSAS CITY, MO 64138

For Territory Served by Aquila Networks - L&I

LARGE POWER SERVICE (LPS) (Continued) ELECTRIC

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

Where transformers are required for individual customers under this schedule, the customer may be required to provide satisfactory space and access on his premises for such transformers.

METERING LOSS ADJUSTMENT

Where service is metered at a voltage level other than secondary, an adjustment to both the kilowatt-hour (kWh) and kilowatt (kW) readings will be made as follows:

1. Service Metered at Primary Voltage

Where service is provided directly from a twelve (12) kV circuit feeder and is metered at four (4) kV or twelve (12) kV, the metered kWh and kW will be reduced by one and one-half percent (1.5%).

2. Service Metered at Substation Voltage

Where service is metered at four (4) kV or twelve (12) kV directly from a substation, the metered kWh and kW will be reduced by two and one-half percent (2.5%).

3. Service Metered at Transmission Voltage

Where service is metered at thirty-four (34) kV and above directly from a transmission line, the metered kWh and kW will be reduced by three percent (3%).

If the customer's meter has to be relocated in order for the customer to become eligible for the metering loss adjustment, all costs associated with the relocation shall be paid by the customer.

This adjustment only applies to customers served at secondary voltage, MO944.

This Meter Loss Adjustment is no longer available to new installations as of the effective date of this tariff.

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KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS

RESIDENTIAL SERVICE ELECTRIC

AVAILABILITY

This schedule is available to single family residences, individually metered living units in multiple occupancy buildings, and private rooming houses for all residential uses of electric service including lighting, cooking, house heating, water heating, refrigeration, air conditioning, household appliances, and ordinary domestic uses. The maximum size motor permitted on this rate schedule is ten (10) horsepower. This rate schedule is for single-phase service.

A "residential" ("domestic") customer under this residential rate classification is a customer who purchases electricity for "domestic use." "Domestic use" under this rate classification includes that portion of electricity that is ultimately consumed at a single-family or individually metered multiple-family dwelling, and shall apply to all such purchases regardless of whether the customer is the ultimate consumer.

This schedule is intended to satisfy the provisions of Section 144.030(23) RSMo by establishing and maintaining a system and rate classification of "residential" to cause the residential sales and purchases of electricity under this rate schedule to be considered as sales for domestic use.

Where a portion of a residence unit is used for non-residential purposes, the appropriate general service schedule is applicable to all service. However, if the wiring is arranged so that the service for residential purposes and for non-residential purposes can be metered separately, this schedule will be applied to the residential service. Service to hotels, recognized rooming or boarding houses or to the halls, basement or other common use portions of an apartment building will not be supplied under this schedule.

MONTHLY RATE FOR RESIDENTIAL GENERAL USE, MO860

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$18.00 per month	\$18.00 per month
Energy Charge		
First 600 kWh	\$0.0650 per kWh	\$0.0650 per kWh
Next 400 kWh	\$0.0700 per kWh	\$0.0600 per kWh
Excess kWh	\$0.0741 per kWh	\$0.0600 per kWh

In addition to the above charges, Interim Energy Charge IEC-B will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

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KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS

RESIDENTIAL SERVICE (Continued)
ELECTRIC

MONTHLY RATE FOR RESIDENTIAL ELECTRIC SPACE HEATING, MO870

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$18.00 per month	\$18.00 per month
Energy Charge		
First 600 kWh	\$0.0600 per kWh	\$0.0500 per kWh
Next 400 kWh	\$0.0650 per kWh	\$0.0417 per kWh
Excess kWh	\$0.0741 per kWh	\$0.0335 per kWh

In addition to the above charges, Interim Energy Charge IEC-B will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This rate (MO870) applies to residential customers when electric space heating has been permanently installed as the primary source of heat and able to provide whole house heating.

Space heating equipment shall consist of permanently installed electric heating equipment of a size and design approved by the Company. Primary heating source is defined as the system capable of being the sole source of heat during the majority of the heating season. Whole house heating is defined as the distribution of controlled heat throughout the private dwelling unit.

MONTHLY RATE FOR RESIDENTIAL OTHER USE, MO815

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$7.00 per month	\$7.00 per month
Energy Charge		
For all kWh's	\$0.0700 per kWh	\$0.0640 per kWh

In addition to the above charges, Interim Energy Charge IEC-B will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This rate (MO815) applies to residential customers who do not qualify under any other residential rate.

Customers qualifying for this rate will generally be those with well pumps, barns, machine sheds, detached garages and home workshops, whose meter is not connected to a single or multiple occupancy dwelling unit. This rate schedule cannot be used for any commercial or industrial customer.

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KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS:

RESIDENTIAL SERVICE (Continued)

ELECTRIC

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge.

TERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

Aquila, Inc., dba

AQUILA NETWORKS

KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS

SMALL GENERAL SERVICE (SGS) ELECTRIC

AVAILABILITY

This schedule is available for general service use. This includes lighting, power or combined lighting and power service. Customers receiving service at more than one (1) voltage level will be treated as multiple customers for billing purposes.

This schedule is not available for standby, breakdown, supplementary, interruptible, maintenance or resale service.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company's secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 8,320, 12,470, 13,800 or 24,900 nominal volts. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE FOR SGS NON DEMAND BILLING, MO710

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$7.00 per month	\$7.00 per month
Energy Charge		
For the first 1,000 kWh's.....	\$0.0650 per kWh	\$0.0640 per kWh
For the next 4,400 kWh's.....	\$0.0700 per kWh	\$0.0500 per kWh
For all over 5,400 kWh's.....	\$0.0750 per kWh	\$0.0500 per kWh

In addition to the above charges, Interim Energy Charge IEC-A will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

Customers receiving service under this rate (MO710) will generally not have a demand meter. When energy usage of the customer exceeds five thousand four hundred (5,400) kWh per month or Company has reason to believe that the customer's demand exceeds thirty (30) kW regardless of the energy usage, Company shall install a demand meter. A customer may request and Company shall install a demand meter regardless of the customer's energy usage, if customer has reason to believe that their energy usage exceeds one hundred eighty (180) hours of use.

P.S.C. MO. No. 1Original Sheet No. 20

Canceling P.S.C. MO. No. _____

Sheet No. _____

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KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS

SMALL GENERAL SERVICE (SGS) (Continued) ELECTRIC

MONTHLY RATE FOR SGS DEMAND BILLING AT SECONDARY VOLTAGE, MO711

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$30.88 per month	\$30.88 per month
Demand Charge	\$5.21 per kW	\$3.22 per kW
Energy Charge		
First 180 hours of use	\$0.0400 per kWh	\$0.0400 per kWh
Over 180 hours of use	\$0.0300 per kWh	\$0.0300 per kWh

In addition to the above charges, Interim Energy Charge IEC-A will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

Customers receiving service under this rate (MO711) must have a demand meter installed.

MONTHLY RATE FOR SGS DEMAND BILLING AT PRIMARY VOLTAGE, MO716

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$24.05 per month	\$24.05 per month
Demand Charge	\$5.08 per kW	\$3.14 per kW
Energy Charge		
First 180 hours of use	\$0.0390 per kWh	\$0.0390 per kWh
Over 180 hours of use	\$0.0293 per kWh	\$0.0293 per kWh

In addition to the above charges, Interim Energy Charge IEC-A will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This rate (MO716) is not available for new installations as of the effective date of this tariff.

Aquila, Inc., dba

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For Territory Served by Aquila Networks – MPS

KANSAS CITY, MO 64138

SMALL GENERAL SERVICE (SGS) (Continued) ELECTRIC

MONTHLY RATE FOR SGS SHORT TERM SERVICE, MO728

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$7.00 per month	\$7.00 per month
Energy Charge		
For all kWh's	\$0.0700 per kWh	\$0.0640 per kWh

In addition to the above charges, Interim Energy Charge IEC-D will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

This short term service rate is designed for service supplied for less than twelve (12) months at one (1) point of delivery and measured through one (1) meter. Service will be furnished only when and where Company has available capacity in lines, transformers and ancillary equipment.

Customers receiving service under this rate (MO728) will generally be special events including carnivals, circuses, fairs, and/or festivals. In addition this rate will be applied to builders, contractors, and/or developers' constructing residential, commercial or industrial sites prior to occupancy and/or a permanent meter is set.

DEFINITION OF SUMMER AND WINTER BILLING PERIOD

The four (4) summer months shall be defined as the four (4) monthly billing periods of June through September. The eight (8) winter months shall be defined as the eight (8) monthly billing periods of October through May.

PAYMENT AND LATE PAYMENT CHARGE

Bills for electric service are due and payable within twenty-one (21) days from date of bill. Any amounts not paid on or before the due date of the bill shall be subject to a late payment charge set forth in the Company's Rules and Regulations.

MINIMUM MONTHLY BILL

The minimum monthly bill shall be the customer charge plus the monthly demand charge if applicable.

BILLING DEMAND

The billed demand shall be the maximum fifteen (15)-minute demand, measured during the current billing period.

HOURS OF USE

The kWh of energy usage per kW of billed demand, (kWh ÷ billed kW).

STATE OF MISSOURI, PUBLIC SERVICE COMMISSION

Schedule JMT-3, SPECIMEN TARIFF

P.S.C. MO. No. 1Original Sheet No. 22

Canceling P.S.C. MO. No. _____

Sheet No. _____

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For Territory Served by Aquila Networks – MPS

KANSAS CITY, MO 64138

SMALL GENERAL SERVICE (SGS) (Continued)
ELECTRICTERMS AND CONDITIONS

Service will be furnished under, and this schedule shall be subject to Company Rules and Regulations.

The above rate or minimum bill does not include any franchise or occupational tax.

The Company "Tax and License Rider" is applicable to all charges under this schedule.

The voltage, frequency, and phase of all service under this schedule shall be only as specified by the Company.

Service is furnished for the sole use of the customer on the premises described in the service application. There shall be no resale or submetering of energy.

Motors served on this schedule shall not exceed a size and design as specified by the Company.

Issued:

Issued by: Gary Clemens, Regulatory Services

Effective:

P.S.C. MO. No. 1Original Sheet No. 23

Canceling P.S.C. MO. No. _____

Sheet No. _____

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KANSAS CITY, MO 64138

For Territory Served by Aquila Networks – MPS

LARGE GENERAL SERVICE (LGS) ELECTRIC

AVAILABILITY

This schedule is available for general service use. This includes lighting, power or combined lighting and power service. All service will be provided through one (1) (set of) compound watt-hour and demand meter(s) for each delivery point. A delivery point is defined as the point of metering from which the customer receives service from Company's secondary or primary distribution system. Customers receiving service at more than one (1) voltage level will be treated as multiple customers for billing purposes.

This schedule is not available for standby, breakdown, supplementary, interruptible, maintenance or resale service.

CHARACTER OF SERVICE

Single-phase, 60 Hertz, nominally 120/240 volt firm electric service, provided from the Company's secondary distribution system. Three-phase secondary service shall be available where three-phase facilities are available without additional construction or may be made available at additional charge at voltages not exceeding 480 volts. Three-phase primary distribution service shall be available where primary distribution facilities are available without additional construction or may be made available at additional charge at 8,320, 12,470, 13,800 or 24,900 nominal volts. The customer may request contractual service from the 69,000 volt or 34,500 volt systems, if such systems are available at the customer's point of delivery without additional construction, and the customer provides transformation.

MONTHLY RATE FOR LGS AT SECONDARY VOLTAGE, MO720

	<u>Summer</u>	<u>Winter</u>
Customer Charge	\$85.71 per month	\$85.71 per month
Demand Charge	\$5.20 per kW	\$3.60 per kW
Energy Charge		
First 180 hours of use	\$0.0340 per kWh	\$0.0300 per kWh
Next 180 hours of use	\$0.0300 per kWh	\$0.0270 per kWh
Over 360 hours of use	\$0.0265 per kWh	\$0.0240 per kWh

In addition to the above charges, Interim Energy Charge IEC-A will be added to each customer's bill on a per kWh basis. All or a portion of this charge is potentially refundable as described in Company's Interim Energy Charge Rider.

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Issued by: Gary Clemens, Regulatory Services

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