# 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.,	)	Case No. EO-2002-384
formerly known as UtiliCorp United Inc.	)	

#### POSTHEARING BRIEF OF AQUILA, INC.

Aquila, Inc. ("Aquila" or "Company"), submits this Posthearing Brief to the Missouri Public Service Commission ("Commission") in accord with the Commission's Order dated December 8, 2005 Directing Filing.

#### **HISTORY**

The history of this case is one that is unique in that it has transpired over the past four years, and had as its origin Aquila's 2001 electric rate case, Case No. ER-2001-672. The detailed history of this proceeding has been set out in the Company's Prehearing Brief.

It is, however, worth noting here that the length of time with which this case has proceeded is one which at one level was necessary to enable parties the opportunity to complete the data collection and necessary studies to conclude a cost of service study. But on another level this case has suffered from delays which may or may not have been necessary or justified. In any event, the Company strongly urges the Commission to now decide the issues which are the subject of this case so that the results may be implemented in the context of Aquila's pending rate case, Case No. ER-2005-0436.

#### **PURPOSE**

It might be easy in a cost of service/rate design case, especially where one has a contemporaneously occurring rate case, to lose sight of the specific purpose of this proceeding. It should be remembered that the parties to this case have agreed on the purpose of this proceeding in the Unanimous Stipulation and Agreement, which has been approved by the Commission.<sup>2</sup> Specifically, this case was established to study, on a revenue neutral basis, Aquila's class cost-of service, to identify load characteristics and to develop revenue neutral shifts to properly balance class rates.<sup>3</sup> In Case No. ER-2001-672, the Unanimous Stipulation and Agreement, included this spin-off docket for the purpose of review, on a "revenue-neutral basis" Aquila's class cost of service. Unanimous Stipulation and Agreement, Case No. ER-2001-672. The purpose was to allow a more detailed analysis of cost-causal factors so that any imbalances could be identified and recommendations as to necessary changes advanced while allowing full consideration of the issues without the overcast of contention present in the usual rate case as well as the usual time constraints. Furthermore, the Commission reinforced this charge when it stated in the Order Regarding Consolidation and Procedural Schedule issued in this case on August 23, 2005, p. 7, that the underlying principle in cost of service is "matching costs to the customers who cause those costs." In light of the fact that the testimony and evidence

<sup>&</sup>lt;sup>1</sup> Unanimous Stipulation and Agreement, Case No. ER-2001-672, pgs. 5-6.

<sup>&</sup>lt;sup>2</sup> Order Approving Stipulation and Agreement, Case No. ER-2001-672, February 28, 2002; Order Regarding Consolidation and Procedural Schedule, Case No. EO-2002-384, August 23, 2005.

<sup>&</sup>lt;sup>3</sup> Order Approving Stipulation and Agreement, Case No. ER-2001-672, pgs. 3-4, pg. 8.

presented in this case by all of the parties recognizes imbalances in Aquila's existing cost of service, it would therefore appear imperative under Section 393.120.2,<sup>4</sup> that the Commission fulfill the stated purpose and address the imbalances argued here by the parties in the context of this case.

The Prehearing Brief of the Staff, however, seems to suggest that the Commission should "consolidate" this case with Aquila's now pending rate case, and base its decision on the cost of service issues on a "new cost of service study" which would be developed in the context of that proceeding.

The Company recognizes the pressure and tension associated with determining class cost of service and rate design in a traditional rate case, a situation which this Commission also recognized when it agreed to the "spin-off" of this docket from an earlier rate case. The Commission should not now reverse course and put the cost of service issues back in the middle of a pending rate case. In addition, Staff in opening remarks at the evidentiary hearing stated that in this case the "Commission only decide the allocation issues ..." in this case. (Tr. p. 98, l. 5-7) This suggestion is questionable at best in light of the three plus years which have been invested in this case, along with the fact that there is a time fuse attached to the Commission's window for issuing an

<sup>&</sup>lt;sup>4</sup> Section 393.120.2, RSMo 2000.

<sup>2.</sup> No gas corporation, electrical corporation, water corporation or sewer corporation shall directly or indirectly by any special rate, rebate, drawback or other device or method, charge, demand, collect or receive from any person or corporation a greater or less compensation for gas, electricity, water, sewer or for any service rendered or to be rendered or in connection therewith, except as authorized in this chapter, than it charges, demands, collects or receives from any other person or corporation for doing a like and contemporaneous service with respect thereto under the same or substantially similar circumstances or conditions.

Order in the pending rate case which would necessarily limit the time which has been demonstrated as necessary to effectively complete a cost of service study and rate design. While the Company believes that all of the cost of service issues can and should be disposed of here, the only issue which the Staff would have the Commission decide in this case, after almost four years of hard work by all of the parties, is the allocation issue. The Company thinks that this approach is totally inconsistent with the prior agreements, understandings and orders in this case, and clearly overlooks the purpose for which this case was established.

The Commission has confirmed the Company's approach to this case by its August 23, 2005, Order in which it indicated that the best course would be to resolve this class cost of service case separately from the rate case now pending, and that it will permit the class cost of service issues and rate design issues to be resolved separately from the revenue requirement issues that generally receive most of the attention in a rate case. (Order Regarding Consolidation and Procedural Schedule, Case No. EO-2002-384, August 23, 2005) The Commission further recognized that this approach would reduce the number of issues to be presented and determined in the rate case. (*Id*)

The pending rate case is obviously one which is quite important to the Company and all other parties. The Company is keenly aware of the synergy between the decision in this case and the pending rate case as it concerns customer rates, and what could be significant rate changes. But these changes, of whatever magnitude, are best served by adoption of the Company's proposed class cost of service and rate design in that it will best match costs to the customers who cause those costs, thus aligning the

overall system. As Mr. Conrad, counsel for the industrial intervenors, pointed out in his opening remarks to the Commission, it is in the interest of the utility, the utility commissioners, the regulators, and all the other customers, to have rates that are aligned with how costs are incurred. (Tr. p. 78, l. 22 - 25) He added that in this respect, costs which are appropriately aligned help the utility's earnings remain stable through periods of time when costs change for reasons beyond the utility's control by assuring that revenues match the changes in cost. (Tr. p. 79, l. 1 - 5) One has but to wonder whose interests are well served by limiting a decision in this case to allocation factors alone.

Regardless of which cost of service study the Commission might adopt in this matter, all of the parties have recognized and recommended changes in class cost of service, essentially aligning costs. All of the parties, with the exception of the OPC, recommend the same direction of change in all classes, regardless of which allocator the party applied. The Company believes that the cost of service study which it has presented is a cost alignment which is based upon a reasonable and sound methodology, and should be adopted by the Commission in this case.

#### **CLASS COST OF SERVICE**

### General Consensus on Direction

The positions of the parties on the issue of cost of service and rate design have been submitted in the various Position Statements. Rather than attempting to review in detail those positions, Aquila would simply refer the Commission to those documents.

The Commission has no doubt observed that the positions of the parties in this proceeding are all relatively similar. This is in line with the well accepted idea that cost

of service and rate design is as much art, as science. The art, however, cannot be accomplished without a solid foundation of science, and art most certainly cannot cure a cost of service study and rate design which lacks science. In this case, the Staff's allocation method for example, may arguably be calculated "artfully", but clearly lacks supporting studies or the data necessary to satisfy the "science" component.

Since the goal of cost of service is to align costs with cost causers, it would then follow that what may be a reasonable approach in cost of service may actually be distinguishable from what is the "most correct." (Tr. p. 281, l. 22, 24 – 25, p. 282, l. 5) In that "reasonable methods" <sup>5</sup> of allocation are to be employed absent the ability to directly assign costs, what the Company has done is just that, they have provided the Commission with a reasonable method in all respects.

Witness Matt Tracy's description of cost of service and rate design as analogous to a game of lawn darts, where the darts are actually bean bag chairs, is useful in understanding which methods proffered best reflect class responsibility while being tested as a reasonable method.<sup>6</sup> Witness Tracy testified that load research guidelines under the Public Utilities Regulatory Policy Act of 1978 ("PURPA") recommends a ninety percent confidence level plus or minus ten percent relative accuracy at the time of the system peak. (Tr. 115, I. 14 – 21) Essentially, within plus or minus ten percent,

<sup>&</sup>lt;sup>5</sup> Order Regarding Consolidation and Procedural Schedule, Case No. EO-2002-0384, August 23, 2005, p. 7 (wherein the Commission stated that "Utility customers are generally grouped into classes based on shared characteristics and the utility's operating costs are then either directly assigned to a class, where

possible, or allocated using reasonable methods to reflect class responsibility.)(Emphasis added.)

<sup>&</sup>lt;sup>6</sup> (*Id*)

ninety percent of the time. (Tr. 116, l. 15 – 17) Witness Tracy agreed that this is a twenty percent range with a ninety percent confidence level in the change. (Tr. 116, l. 22-24) The analogy of tossing a bean bag, as opposed to a lawn dart, is illustrative of this range, and represents the best estimate you have. (Tr. 114, l. 7-9, 23) It is the "squishy" nature of the process which serves as a foundation for explaining why, when one reviews the results presented by of all the parties, despite their various choice of allocators (except for the studies adopted by the OPC), indicate similar results in certain of the rate categories.

During the hearing, Exhibit 25, a chart depicting the positions of the parties while also further illustrating the resultant change represented by the position of the parties in this case, was admitted into evidence.

Specifically, the data represented is for the current period, including data collected since the 2001 rate case, and has been updated through the last rate case so that it illustrates current information for cost of service based on the now existing rate levels. (Tr. p. 71, l. 13 - 18) Exhibit 25, set out below, illustrates the change that would result if rates were maintained at the current level (Tr. p. 71, l. 20 - 23) and is intended to show the recommendations of the parties that have filed class cost of service studies for the various rate classes for both the MPS and L&P operating divisions.

**EXHIBIT 25** 

						MPS						
	Aquila				Staff		S	IEUA/AG Processin	ig/FEA		OPC	
MPS	(\$)	(9	%)	MPS	(\$)	(%)	MPS	(\$)	(%)	MPS	(\$)	(%)
RES- GEN	\$15,898,191	13.09%	8.22%	RES	\$5,208,118	3.06%	RES	\$15,767,357	9.27%	RES	(\$352,310)	-0.20%
RES-SH	(\$1,911,037)	-3.93%										
SGS-S SGS-P	(\$5,185,134) (\$15,562)	-9.64% - 20.70%	-9.66%	SGS	(\$2,175,365)	-4,04%	SGS	(\$5,457,184)	-10.13%	SGS S&C Muni	(\$2,978,263)	-5.45%
LGS-S LGS-P	(\$6,570,348) (\$18,370)	- 15.46% -4.27%	-14.91%	LGS	(\$3,969,094)	-8.98%	LGS	(\$5,971,419)	-13.51%	LGS	(\$1,517,050)	-3.38%
LPS-S LPS-P	(\$2,249,538) (\$1,255,689)	-8.62% -5.03%	-6.86%	LPS	\$651,854	1.28%	LР	(\$4,375,026)	-8.56%	LPS	\$4,714,387	9.07%
OTHER	\$44,097	7.82%	7.82%	Other	\$64,583	11.45%	SC	\$36,272	14.16%	SC	\$133,235	23.15%
LIGHTS	\$1,263,390	24.47%	24.47%	Lighting	\$219,904	4.26%						

Aquila Staff								SIEUA/AG Processin	ig/FEA	OPC		
L&P	(\$)	(9	<b>6</b> )	L&P	(\$)	(%)	L&P	(\$)	(%)	L&P	(\$)	(%)
RES-GEN	\$1,676,021	7.88%		!		· · · · · · · · · · · · · · · · · · ·						
RES-H2O	\$692,940	13.38%	6.88%	RES	\$1,431,180	3.48%	RES	\$5,572,654	13.56%	RES	\$294,102	0.70%
RES-HEAT	\$465,482	3.15%										
SGS	(\$936,669)	-12.34%	-12.34%	SGS	(\$1,055,659)	-13.94%	SGS	(\$1,112,518)	-14.69%	SGS	(\$1,333,277)	-17.26%
LGS-S	(\$1,235,591)	-7.14%	-7.76%	LGS	(\$1,624,995)	-9.17%	LGS	(\$2,423,500)	-13.67%	LGS	(\$948,679)	-5.23%
LGS-P	(\$124,253)	-59.37%	-7.76%	LGS	(\$1,024,333)	-9.1770	Lus	(\$2,723,300)	-13.07 70	1 203	(4910,079)	-3.23 70
LPS-S	(\$80,977)	-0.42%	1 4004	100	#1 144 FFD	4.000/	LPS	(42.026.627)	-8.89%	LPS	\$1,987,854	8.45%
LPS-P	(\$259,760)	-7.32%	-1.48%	LPS	\$1,144,552	4.99%	LPS	(\$2,036,637)	-0.89%	LPS	∓±,507,60 <del>4</del>	0.45%
LIGHTS	(\$197,193)	-8.79%	-8.79%	LIGHTS	\$105,322	4.70%						

Exhibit 25 clearly demonstrates that there is consensus among the parties as to the direction of suggested rate adjustments in several of the classes. Specifically, all of the parties agree that rates for the small general service and large general service rate classes for both MPS and L&P should be reduced. The differences in these two classes arise as to how much of a reduction should be implemented.

The significant disagreements occur between the residential and the large power classes. The Company's cost of service study would indicate that the MPS residential class should be increased by approximately 8.22%. The Staff suggests an increase of 3.06%, the industrial intervenors and FEA endorse a 9.27% increase, and the OPC offers a minimal decrease of -0.20%. The large power service recommendations for the MPS division include the Company's proposed -6.86% reduction, an -8.56% reduction suggested by the industrial intervenors and FEA, in contrast to the 9.07% increase suggested by the OPC. (Exh. 25) The range of the changes suggested between the OPC and the industrial intervenors and FEA is more than 17%.

In the L&P division, the suggested changes for the residential class include a 6.88% increase recommended by the Company, a 3.48% increase by the Staff, and a 13.56% increase by the industrial intervenors and FEA. The OPC suggest a slight decrease of -0.70%. (Exh. 25) In the large power service class, the Company is recommending a decrease of -1.48%, Staff recommends a 4.99% increase, and an increase of 8.45% offered by OPC. (Exh. 25) The industrial intervenors and FEA have suggested an -8.89% decrease. (Exh 25)

The proposed changes, while clearly a product of the allocators selected, are also not surprising representations of the interests of the parties. It is not unexpected to see an analysis which produces a result favorable to residential customers from the OPC, nor one favorable to industrials from the industrial intervenor.

In light of the fact that changes are intended to be revenue neutral to Aquila, it can fairly be stated that the Company has no agenda other than urging that rates are aligned appropriately and that the rates that are in place are based on cost of service.

(Tr. p. 78, I. 22 - 25; Tr. p. 79, I. 1 - 5) It is when there is harmony in the cost of service and rate design that the Company is in a better position to withstand impacts over which it has no control such as the addition of customers, loss of customers, weather, warm summers, and cold winters for example. (Tr. p. 78, I. 5 - 7) Likewise, one would expect to see the Staff seeking to balance the interests of all concerned in its recommendation to the Commission.

## The Conservation Question

One of the first items which drew questions from the Commission addressed conservation. Both Chairman Davis and Commissioner Gaw, during the evidentiary hearing, made inquiry of witnesses regarding "conservation." The ultimate form of conservation is discontinuation of use, but it is doubtful that complete abandonment of use was the goal being suggested by the Commissioners in this case. Instead, the Company interprets "conservation" in the context of cost of service to be true alignment of costs with those that cause the cost, so that the cost of service and rate design best reflect the "economically efficient rate" that will ultimately translate into a well guided and accurate price signal to the customer. It is then that the all parties can "use the power most efficiently" and in a manner in which they choose. (Tr. p.120, l. 12 – 14) As was stated by Witness Tracy, Aquila's proffered study will achieve these goals, whereas the methodologies suggested by the Staff as well as the OPC miss the mark.

To the extent that "conservation" encompasses low income and weatherization measures, the Commission generally considers low-income and weatherization measures in the context of a general rate case, as was supported by Counsel for the Missouri Department of Natural Resources and the City of Kansas City during opening

statements. Counsel for MDNR stated that her client did not have a position on any of the issues in this case, and Counsel for the City of Kansas City indicated that he would be interested in these issues in the rate case, but not here. (Tr. p. 87, l. 11 – 13, 17 – 18, and 21; Tr. p. 191, l. 22 – 25; Tr. p. 192, l. 1; Tr. p. 96, l. 9 – 12; 16-20; Tr. p. 97, l. 1 – 2, 6) It is important that the residential class not be mistakenly understood to represent customers with the same financial resources, rather the class represents similar consumers of energy.

#### The Allocator Issue

One of the key issues in this case is the choice of allocator for production or generation and transmission costs. In this case, both the Company and SIEUA and FEA have employed methodologies which are recognized and accepted in the regulatory field and as such are thus reasonable approaches to the allocation issue in this case. In contrast, what the Staff and OPC have presented as generation and transmission allocators cannot fairly be categorized as reasonable.

The Average and Excess 3CP method selected by the Company is not only reasonable but also best reflects the unique load shapes of the MPS and L&P divisions, while also providing customers with the information they need about using or not using the Company's service. (Tr. p. 190, l. 16 – 18; Tr. p. 191, l. 8 – 14) Witness Tracy testified that "[R]esidential customers are the driving force in [the company's] summer peak." (Tr. p. 125, l. 23 – 25) While referencing rebuttal Schedule JMT-2 in his testimony he further explained that "residential customers are the ones that have this really massive peak compared to their base load in the summer, and that's what drives the cost of both St. Joe and the Missouri Public Service systems." (Tr. p. 126, l. 5 – 8)

The "massive peak" discussed by Company Witness Tracy is evidence that selection of a methodology which adequately accounts for Aquila's summer-peaking load shape is essential to producing cost of service results which are adequately aligned. He additionally testified that the Company's method is one which best reflects the economically efficient rate, which he explained as the rate that provides the best price signal to the customer. (Tr. p. 193, I. 2-5) He further explained that "[T]o the extent that everybody pays what it costs, then everybody's behaving in the most efficient manner .." (Tr. p. 193, I. 21-24)

Staff's time-of-use allocator is designed to allocate fixed costs to the customers in a manner that essentially matches energy. Staff supports its allocators with repeated references to alleged relationship between these fixed costs and the energy used by the customers, a relationship that was demonstrated to be false. Staffs allocation method places a disproportionate burden on Aquila's large general service and large power service customers in favor of the residential class.

The time of use method results in high load factor customers bearing the burden in that it will allocate the lowest share of costs to the low load factor customers, which in this case are the residential class. Staff witness Busch agreed that the "greater the proportion of costs classified as energy related, the greater is the revenue responsibility of high load factor classes and the less is the revenue responsibility of low load factor customers. (Tr. p. 284, l. 5-10, 12) Company Witness Tracy testified that the "lowest income customers are not typically your lowest use customers. The issue being your lowest income customers typically can't afford the more efficient appliances, cannot afford the better insulated home, cannot afford the high efficiency E-glass windows ..."

(Tr. p. 117, l. 18 - 23) The residential class therefore is not necessarily representative of the classes ability to pay, but rather represents those customers with similar demands on the system. While the Commission may wish to adopt a policy which takes into account the robust characteristics of customers, the time of use allocator employed by the Staff could not achieve this sort of policy goal.

As to generation and transmission costs, the Staff has adopted a time-of-use allocator, whereas the OPC has adopted what has been described as a twelve month non-coincident average and peak allocator, as well as an energy allocator.

## The Time-Of Use Allocator As Applied By Staff In This Case Is Bogus

The time-of-use allocator goes back more than twenty years to the tenure of Dr. Mike Proctor, who was the chief economist of the Staff. (Tr. p. 322, l. 3-6) The "time-of-use" allocator is something which Dr. Proctor created and which has been suggested by Staff as a method of choice for the allocation of generation costs in class cost of service cases.<sup>7</sup> Dr. Proctor was not a witness in this case, nor did he provide any supporting documentation which would explain why in his expert opinion the facts of this case are appropriate for the time of use allocation. Witnesses Busch and Watkins for the Staff merely indicated that the time-of-use method is "reasonable" on its face. (Tr. p. 308, l. 3-7; Tr. p. 325, l. 12)

<sup>&</sup>lt;sup>7</sup> In Re Arkansas Power & Light, 25 Mo. PSC (N.S.) 101, Case No. ER-81-364 (April 1982); In Re Kansas City Power & Light Company, Case No. EO-78-161, (February 28, 1983); In Re Union Electric Company, 27 Mo. PSC (N.S.) 183 (March 29, 1985); In Re St. Joseph Light & Power Company, 1 Mo. PSC 3d 450 (December 11, 1992).

The "time-of-use allocator" has its Missouri origin in the case in *Re Arkansas Power & Light Company.* 25 Mo. PSC (N.S.) 101, Case No. ER-81-364 (April 1982) (hereinafter "*AP&L*") In *AP&L* the Commission concluded that the "evidence in [the] case supports a finding that the average and peak method for allocating fixed generation and transmission costs is the **most reasonable method of those methods suggested in this record** for allocating costs." 25 Mo. PSC (N.S.) 101, 118 (emphasis added) The Commission made its determination based upon the facts and evidence before it in reaching its conclusions. In addition, in *AP&L* the Commission concluded that

AP&L should submit a cost-of-service study in conjunction with its next Missouri filing for a general increase in rates, and that the Company should collect and prepare load research data in a manner which would permit other parties to prepare time-of-use allocations for fixed generation and transmission costs for Commission consideration in the Company's next Missouri rate case.

AP&L, at 125. (emphasis added) In the *AP&L* case the Staff suggested to the Commission that the "most appropriate manner of allocating fixed generation and transmission costs to customers classes would be on a time-of-use basis ..." 25 Mo. PSC (N.S.) 101, 106. What did not happen in the *AP&L* case was an acclamation by the Commission that the time-of-use allocator for fixed generation and transmission costs is to become a holy grail of allocators. Rather the Commission merely indicated that it would like to have the data collected and presented for "**consideration**" in the next rate case.

The Commission notably considered the *AP&L* case based upon the evidence submitted, which is also worth review now as applied to the instant case. The

Commission in *AP&L* indicated that "there is no argument over the general proposition that baseload units have lower running costs and higher capacity costs than peaking units." 25 Mo. PSC (N.S.) 101, 116. In light of this general proposition, the Commission further indicated in the *AP&L* case that it was **not persuaded** that this general proposition "should justify the treatment of baseload capacity costs as energy costs." *Id.* Aguila has stated in the Rebuttal Testimony of David Stowe that

Staff's TOU allocator is similar to the production stacking method, insofar as it assumes a certain percentage of fixed costs are allocated on energy and the remainder on demand. In other words, there is a certain mix, or stack, of generating units which meet the requirements of a base level of load, and the fixed costs of that base generation mix is the energy portion of the capacity costs. The remainder of the fixed costs are allocated on demand.

(Witness Stowe, Rebuttal Testimony at p. 11, I. 10–15) Company Witness Stowe stated that the "TOU allocator in this case" used by Staff was "something of a hybrid." (Stowe, Rebuttal Testimony at p. 20, I. 20) The similarity of the results achieved by Staff in the use of their hybrid TOU allocator and an energy allocator are even more clear when reviewed in Table 2 prepared by Company Witness Stowe. (Rebuttal Stowe, p. 15, I. 9) Witness Stowe, ultimately concluded that the "net result was an energy allocation applied to all fixed production costs." (Rebuttal Testimony Stowe, p. 13, I. 1 – 2)

TOU Allocators	Prod. Capacity	Prod. Energy	Trans. Capacity	ENERGY	DIFF Prod Capacity	DIFF Prod Energy	DIFF Trans. Capacity		
RES GEN	36.40%	32.00%	31.41%	31.34%	5.07%	0.67%	0.07%		
RES SH	13.22%	14.08%	15.29%	14.13%	-0.90%_	-0.05%	1.16%		
SGS	15.69%	15.31%	15.35%	15.26%	0.43%	0.06%	0.09%		
LGS	14.46%	15.40%	15.34%	15.53%	-1.08%	-0.13%	-0.20%		
MODINE	0.10%	0.12%	0.12%	0.12%	-0.02%	0.00%	0.00%		
TES	0.13%	0.13%	0.13%	0.14%	0.00%	0.00%	-0.01%		
LIGHTING	0.41%	0.74%	0.69%	0.80%	-0.39%	-0.06%	-0.11%		
LPS	19.59%	22.21%	21.68%	22.69%	-3.10%	-0.48%	-1.01%		
TOTAL	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%		
Table 2: Comparison of Staff's TOU and Energy Allocators									

In essence, the TOU allocator used by Staff in this case is not what it purports to be, nor what was contemplated by the Commission in the AP&L case, instead, the TOU allocator used here by Staff, is in fact, as stated by Witness Stowe, a hybrid allocator that is actually an energy allocator, something which the AP&L decision clearly rejected for baseload costs.

Another problem with the Staff's purported time-of-use allocator is what is absent. In describing time-differentiated methods, of which the Staff's hybrid is, the NARUC manual says,

> The basic principle of such methods is to identify the configuration of generating plants that would be used to serve some specified base level of load[, and] to classify the costs associated with those units as energy related. The choice of the base level of load is crucial because it determines the amount of production plant cost to classify as energy-related.8"

<sup>&</sup>lt;sup>8</sup> NARUC manual. pg. 60.

(Rebuttal Stowe, p. 13, l. 4-6) The NARUC manual further indicates that it is the base level of load that is crucial because it determines the amount of production plant to classify as energy related. (Rebuttal Stowe, p. 13, l. 7-9) In order to achieve even a minimum appearance of compliance with this guideline, it would be reasonable to expect that studies which support the requisite "base level of load" and "generation mix" would be present. (Rebuttal Stowe, p. 11, l. 20-21) The absence of this type of study in the current case creates a fundamental dissimilarity between the type of time-of-use allocator contemplated in the *AP&L* decision and what has been presented to the Commission here by Staff.

In 1983 the Commission decided in *RE Kansas City Power & Light Company*, Case No. EO-78-161 (hereinafter "KCPL"). 25 Mo. PSC (N.S.) 605. In the *KCPL* case, the Commission directed KCPL to perform an updated cost-of-service study to be submitted in conjunction with its next Missouri general rate case, and that said study should include those methods and elements appropriate for a study which included a full hourly time-of-use allocation of both fixed generation costs to the customer classes, or an average and peak allocation of fixed generation costs and an allocation of variable generation costs on the basis of annual class energy usage adjusted for losses. 25 Mo. PSC (N.S.) 605, 607.

The Commission stated that "based on the evidence presented in this case, the Commission finds the time-of-use method to be the most theoretically appropriate approach for allocating generation costs ..." (*Id*) The Commission did not state that the time-of-use method was "reasonable." Rather the Commission went on to say that it

"finds the average and peak allocation method for fixed generation costs as the most reasonable alternative to a full time-of-use procedure." (*Id*)

In the *KCPL* case, as in the *AP&L* case, the Staff again took the position that the "additional cost method", which is also referred to as the "time-of-use" method, was the "most theoretically correct procedure for allocating fixed generation, bulk transmission and energy costs to the customer classes." 25 Mo. PSC (N.S.) 605, 611. In describing the "additional costs method" the Commission indicated that this method

entails estimation of class contribution to system demand during each of the 8,760 hours of the year, identification of the generating plants operating during each hour and the capacity and energy costs associated with these plants, and the assignment of fixed generation, bulk transmission and energy costs to the customer classes based upon a matching of class demand contribution levels with the cost characteristics of the generating plants operating throughout the year.

(Id) (emphasis added) Under the facts of the KCPL case, the Commission agreed with the Staff's position that the additional cost (time-of-use) method is the "most theoretically appropriate approach for allocating fixed generation, bulk transmission and energy costs to the customer classes." 25 Mo. PSC (N.S.) 605, 615. It is noteworthy that at the time the Commission made its finding in the KCPL case that it was made "based upon the evidence" presented in the case, and was not set out as an approach which was the appropriate approach for allocating generation costs in all class cost of service cases. The Commission noted however that KCPL's facilities include plants with varying characteristics in terms of fixed and variable costs (facts which are not in evidence in this case), with the Commission concluding that the "average and peak

method, as proposed by the Staff, provides the most reasonable alternative to the time-of-use procedure for allocating the costs involved." 25 Mo. PSC (N.S.) 605, 617.

Not only are there no generation studies presented by Staff in this case, but the costs associated with generation are also absent. Staff's Witness Busch, on cross examination by counsel for the industrial intervenors, stated that he did not know the revenue requirement of Sibley I, Sibley Unit 2, or the Greenwood units. (Tr. p. 298, I. 4 – 12) Further, Witness Busch clearly stated that he did not calculate the revenue requirements for each generating plant for Aquila. (Tr. p. 298, I. 13 – 15)

Beyond the absence in Staff's study of a base level and generation mix study, the Staff has also gone beyond the framework of a time-of-use allocator by utilizing marginal costs as opposed to embedded costs in its study. In that Missouri regulates utilities on the basis of embedded costs, the use of marginal costs not only is inappropriate, but leads to the incorrect allocation of costs to customers beyond. Company Witness Tracy explained why this shift in allocation occurs where marginal costs are used. (Tr. p. 139, l. 3 – 11) By using marginal costs, the Staff in this case uses the "the cost of the last, the most expensive unit." This penalizes high load factor users such as the industrial customers. (See Witness Matt Tracy Rebuttal Schedule JMT-2, pp. 1 – 7) Under the Staff's approach, high load factor customers are allocated at the higher, marginal cost, rather than actual cost. (Tr. p. 139, l. 12 – 16) This, in effect, shifts a "substantial amount of cost based on energy to those customers." (Tr. p. 139, l. 17 – 19) Because the Staff did not appropriately differentiate the costs for base load, intermediate load and peaking, they could not assign the rates associated with the

relevant rate. (Tr. p. 139, l. 24 – 25; Tr. p. 140, l. 1 – 3; Tr. p. 298, l. 22 – 25; Tr. p. 299, l. 1 – 17)

Knowingly shifting costs using a method which employs "marginal" as opposed to embedded costs inappropriately distorts the outcome in the Staff's allocator. Even Staff Witness Watkins freely acknowledged this inequity by stating that the allocators selected by the Company, the industrial intervenor and the FEA, misalign costs toward residential customers. (Tr. p. 327, I. 15 – 18) Witness Watkins, in response to a question from Commissioner Gaw during the evidentiary hearing, stated that customers with less consistent load factor, namely residential and small general service, still require infrastructure be available for use when there is a customer that "turn[s] on the light switch." (Tr. p. 328, I. 11 - 25; Tr. p. 329, I. 1 - 7) In Witness Watkins' view, the allocators selected by the Company, the industrial intervenors and the FEA do not allocate costs for producing and transmitting energy using energy during off-peak periods to high load factor customers. Despite the fact that he admits that the Staff's allocator does not measure or assign any cost on those not using the system, but for which the system has to be available, namely the residential and small general service classes. (Tr. p. 328, I. 25, Tr. p. 329, I. 1-7) Witness Watkins stated that the Staff's allocator "should allocate some of the[ ] costs" which did not actually occur but potentially could occur but that he did not know that the Staff had a "good way of figuring out what load potentially could be served." (Tr. p. 329, l. 2-7) Staff Witness Watkins clearly stated that Staff "can't directly take that into account" (Tr. p. 329, l. 2 -7) thus, this critical piece of cost allocation was essentially overlooked and disregarded in Staff's analysis, despite the impact it has on classes other than the residential class.

Despite Staff's assertions now that the "time of use" allocator is "reasonable" it has never been determined to be such, and as much the Commission has not ordered this approach as a reasonable methodology in any case. Later in 1988, and again in 1992, the Commission "considered" the time-of-use allocator in *Re Union Electric Company*, Case No. EO-85-17 (hereinafter "Union Electric") and in *Re St. Joseph Light & Power Company*, Case No. EO-88-158 (hereinafter "SJLP"). In neither the *Union Electric* or the *SJLP* cases did the Commission state that the "time-of-use" allocator was a "reasonable" method, nor did the Commission order the application of this allocator to the facts of those cases.

Notable, however, in the *SJLP* case is the fact that the Commission acknowledged the unique load associated with *SJLP* and that the selection of the allocation method in that case was driven by the "need to meet varying peak demand levels throughout the year" in contrast to the Commission's statements in the *AP&L* decision, based upon the evidence in that case, where it was stated that fixed generation and transmission costs are not "solely related to system peak demand."

If the time of use allocation, created by Dr. Proctor, was indeed the gold standard for generation cost allocation, one would not only expect that it would be adopted in other jurisdictions, but that it would, in the twenty plus years since its inception, become a mainstream approach advocated by other experts in this field. It is not, as was stated by Witnesses Tracy and Brubaker. (Tr. p. 160, l. 14 – 16; p. 169, l. 2 – 5; Rebuttal Testimony, Witness Maurice Brubaker, p. 10, l. 11 – 14) The decision by the Staff to adopt the time of use allocator appears to be predictated not on the facts, evidence or data presented in this case, but rather because it is a method which has been

recognized, but not ordered by the Commission, in other Missouri class cost of service cases. A careful reading of the *AP&L*, *KCPL*, *Union Electric* and *SJL&P* cases clearly shows that the Commission's decisions were not about universal application of the time-of-use allocator. <sup>9</sup> Staff Witness Watkins testified to this end as well. (Tr. P. 334, I. 4 – 6, I. 7 – 12)

Even Staff Witness Watkins, in response to Data Request No. 12, indicated that he was unaware of the allocation methodology that Staff had proposed for generation being used in any other states. (Exh. 26, Tr. 178, I. 18 – 20, 24 – 25) A test of efficacy in any methodology is the analysis and evaluation of that method in application, over time, in other cases. In this case, the Staff provided no testimony which would indicate that any effort was made on its part to determine why, such a "theoretically appropriate approach" had not in the intervening twenty years become more common place in application or moreover a part of the mainstream if it is as good as the Staff advocates.

While it is understood that the Commission has made previous findings as to the time of use method as applied to the facts and evidence in other cases, the Commission must decide this case based upon the facts and evidence. When a party advocates a methodology in disregard of the specific circumstances present, including one not based upon the facts and evidence at hand, the result becomes even more suspect,

<sup>&</sup>lt;sup>9</sup> In Re Arkansas Power & Light, 25 Mo. PSC (N.S.) 101, Case No. ER-81-364 (April 1982); In Re Kansas City Power & Light Company, Case No. EO-78-161, (February 28, 1983); In Re Union Electric Company, 27 Mo. PSC (N.S.) 183 (March 29, 1985); In Re St. Joseph Light & Power Company, 1 Mo. PSC 3d 450 (December 11, 1992).

including a suspicion that the choice was result driven as opposed to being driven by the particular case being considered.

## The Allocator Utilized by the OPC is Also Suspect

The allocator selected by the OPC is even more suspect than that which is advanced here by the Staff, and as such should be rejected by the Commission as well in this case. OPC Witness Meisenheimer testified that her method "approximates a time of use method" (Tr. p. 414, l. 6), but also discounted her own method by indicating that it was inferior to what was offered by Staff. (Tr. p. 414, l. 12 - 14) Witness Meisenheimer even stated that she had "not see it elsewhere" when asked where she found this method. (Tr. p. 418, l. 5, 10 - 14) As much as the sponsoring witness of the OPC's methodology has equivocated on the veracity of the allocator she has offered, it should likewise be discounted by this Commission as a reasonable method for allocation of generation costs in this case.

In addition, Witness Brubaker further bolsters the Company's position that the OPC's method is unreasonable in that he testified that a methodology which is not referenced in the NARUC manual "probably is unusual" and that depending on the particular study, it may or may not be consistent with cost causation principles. (Tr. p. 260, l. 4-7) He further elaborated that an "unusual" method could be consistent with accepted cost allocation procedures even though it is not in the NARUC manual, however, the OPC's study is not one that he would put into that category. (Tr. p. 260, l. 11-13)

In understanding what constitutes a reasonable method to be adopted in this case the Commission should give due consideration to those parties which are

advancing positions which are neither reasonable or mainstream. Simply because this process can be "squishy" should not give creative license for the advancement of methodologies which do not meet even the minimal accepted standards in this area. The Staff's methodology, while arguably given support by the Commission in the context of specific cases, is not therefore a de facto "reasonable method" under the facts of this case. Nor do statements by Staff witnesses Busch or Watkins, declaring it to be "reasonable" make it so. As to the methodology selected by the OPC in this case, it was not even a "bean bag" and instead is more like a water balloon which will not, and has not, held up on landing.

Aquila in its prefiled testimony advocates the A&E-3CP methodology, which is supported by the testimony of Company Witness Tracy, and therefore the Company has met its burden of proof pursuant to Section 393.150(2) RSMo 2000.

#### RATE DESIGN

Aquila supports the schedules and rate structure as were described by Company Witness Gray in his surrebuttal testimony.

Company Witness Gray proposed the combination, elimination and addition of rate schedules, including combining duplicate schedules, that frozen schedules be combined with active schedules when possible and that unused schedules be eliminated.

The Company also proposes changes to the existing rate structure on rate schedules which will be more user friendly, not only from a customer viewpoint, but also from the point of view of Company personnel who are called upon to explain and

interpret them, thus eliminating confusion, while mitigating against the probability that complex structures would be applied in error.

The Company's proposed tariffs are not unlike existing tariffs approved by this Commission, specifically, the proposed tariffs are similar to those currently on file by The Empire District Electric Company. The Staff presented testimony from Witness Janice Pyatte, including direct and surrebuttal testimony. Aquila submits that Staff Witness Pyatte's failure to raise issues presented in her surrebuttal testimony regarding rate charges in rebuttal testimony was inappropriate in that it by way of procedure, limits the Company's ability to offer a meaningful response to the issues which Witness Pyatte raised there.

Aquila's proposed rate schedules represent a rate structure which are different than the Company's existing tariffs and rate design. Accepting that something is adequate in its current form overlooks the opportunity to improve that form.

These proposed tariffs would be new for Aquila but they are by no means unusual. Staff Witness Pyatte's rebuttal testimony complains that the rate structures presented by Aquila are "hybrid" implying that they are thus inappropriate. On cross examination Witness Pyatte admitted that Aquila's MPS and L&P existing rate structures are similar to other electric utility rate structures (Tr. p. 405, l. 9 - 13), but furthermore that the Company's proposed rate structures are comparable to The Empire District Electric Company's. (Tr. p. 400, l. 7 - 12) Thus, the proposed rate schedules are not unusual to the Commission.

While the Staff takes the position that the rate designs that Aquila currently has for both the MPS and L&P divisions are "fine and don't need to be changed" (Tr. p. 401,

I. 22 – 24) and that what the Company is proposing "has a lot of flaws in it" (Tr. p. 402, I. 9), these concerns appear to be merely a matter of personal preference as opposed to "substantive" flaws. Even Witness Pyatte characterizes the changes suggested by the Company as "housekeeping" in nature. What Aquila proposes is in essence to streamline and consolidate rate design, where possible, between MPS and L&P. This approach will unite nearly all Aquila Missouri customers on the Company's preferred and proposed rate structures.

The rate structures proposed by the Company are Commission approved, tried and tested and currently in use by The Empire District Electric Company. Additionally, the Company believes that rate structure is best left as a management decision and should not be an element which is micromanaged by the Staff. If, as Witness Pyatte believes that the Company, and the Staff's recommended changes are merely housekeeping, it is not entirely clear what the downside is to "housekeeping" other than Witness Pyatte's unsupported conclusion that the Company's proposals have flaws. The "flaws" perceived by Witness Pyatte may be either easily remedied once the final revenue shifts by customer class are determined, or better characterized as "preferences".

It is important to point out that the concept of customer equity also has a bearing on the reasonableness of rate design and therefore, for the sake of customer equity, there should be some continuity in rate design and the relative cost. This does not mean that certain loads should be served at below cost. Nor does it mean that costs will not increase over time. The rate design which is the subject of review in this case are more than ten years old. There is evidence which has been presented by the

Company which supports adoption of the rate structures which it proposes, including that the proposal is in line with what exists for at least one other Missouri regulated electric utility.

Many of the issues between the parties in rate design amount to what could be characterized as differences of opinion as to the best approach. The Company believes that where these sort of differences are present, that the Company should be left to make the decision. For example, Aquila has proposed that the Small General Service and Large General Service of both MPS and L&P division should be changed to a format which is easier to understand, specifically the "hours of use format". (Direct Testimony of Charles Gray pp. 7- 8, l. 7-20) The "hours of use" format is one which avoids base/seasonal variations in addition to not presenting multiple demand charges, while sending appropriate price signals to customers. The complexity of the rate structures that now exist pose administrative challenges for Aquila personnel, and by reducing the complexity of the rate structure, the Company can make the rate structure not only easier for Aquila personnel to understand while administering services, but also for customers to understand.

#### CONCLUSION

In view of the foregoing, Aquila respectfully requests this Commission to adopt its class cost of service study as a reasonable method in this case as well as find that the proposed rate design methodology and the results produced thereby are also reasonable.

Respectfully Submitted,

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#### CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document was delivered by electronic service where available and first class mail or by hand delivery, on this 19th day of December, 2005, to the following:

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