Exhibit No.:	
Issues:	Rate Design
Witness:	James A. Busch
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Surrebuttal Testimony
Case No.:	ER-2006-0314
Date Testimony Prepared:	October 6, 2006

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

FILED

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Missouri Public Service Commission

SURREBUTTAL TESTIMONY

OF

JAMES A. BUSCH

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

Jefferson City, Missouri
October 2006

Staff Exhibit No. 110
Case No(s). ER-2006-0314
Date 10-16-06 Rptr KF

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company for Approval to Make Certain Changes in its Charges for Electric Service to Begin the Implementation of Its Regulatory Plan	)))))	Case No. ER-2006-0314

AFFIDAVIT OF JAMES A. BUSCH

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

James A. Busch, of lawful age, on his oath states: that he has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 5 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

James A. Busch

Subscribed and sworn to before me this 5th day of October, 2006.

Susan L Sundermeyer
Notary Public

My commission expires 9-21-10

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

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

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OF

JAMES A. BUSCH

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

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SURREBUTTAL TESTIMONY

OF

JAMES A. BUSCH

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

Q. Please state your name and business address.

A. My name is James A. Busch and my business address is P. O. Box 360, Jefferson City, Missouri 65102.

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

A. I am a Regulatory Economist III in the Economic Analysis Section of the Energy Department, Utility Operations Division of the Missouri Public Service Commission (Staff).

Q. Are you the same James A. Busch who filed direct and rebuttal testimony on behalf of Staff in this proceeding?

A. Yes I am.

Q. What is the purpose of your surrebuttal testimony in this case?

A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Ford Motor Company, Praxair, Inc., and Missouri Industrial Energy Consumers (Industrials) witness Maurice Brubaker. Specifically, I will address Mr. Brubaker's criticism of Staff's use of an Average & Peak (A&P) allocator for production and transmission costs.

Q. Is anyone else filing surrebuttal testimony for Staff concerning class cost of service?

A. Yes, Staff witness Janice Pyatte is filing Staff's updated class cost of service study.

Executive Summary

Q. Please summarize your surrebuttal testimony.

A. I respond to Ford Motor Company, Praxair, Inc., and Missouri Industrial Energy Consumers (Industrials) witness Maurice Brubaker's criticisms in his rebuttal testimony of Staff's use of 12-month noncoincident peak, Average & Peak (12 NCP A&P) method for allocating production and transmission capacity costs. I show that Staff's method is more reasonable than Mr. Bruabaker's 3-month noncoincident peak, Average & Excess (3 NCP A&E) method.

Production and Transmission Capacity Allocators

Q. On page 9, lines 13 – 14 of his rebuttal testimony, Mr. Brubaker states that in Case No. EO-202-384, Staff admitted that this methodology (Time of Use) had not been used in any other state and, in fact, **has not ever** been adopted, even in Missouri. Do you have a response to that assertion?

A. Yes, this Commission, in 1983, issued a decision in *Re Kansas City Power and Light Company*, 53 PUR4th 315, 25 Mo. P.S.C. (N.S.) 605 (Case No. EO-78-161, March 30, 1983 Report and Order), in which it expressly stated:

> As will be discussed in greater detail, infra, 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* (emphasis added) and, further, finds the average and peak allocation method for fixed generation cost as the most reasonable alternative to a full time-of-use procedure.

This is one of the cases that Mr. James Watkins, Manager of Economic Analysis for the Missouri Public Service Commission provided in a data request response submitted by Staff to SIEUA (Sedalia Industrial Energy Users Association) and AGP (Ag Processing) in Case No. EO-2002-384 where the request asked Staff to "Provide citations and copies of relevant portions of Orders for each instance in which the TOU allocation methodology was favored by past Commissions." Mr. Watkins response mentioned three past Commission decisions, Case No. ER-81-364, Case No. EO-78-161, and Case Nos. EO-85-17 and ER-85-160, where the Commission either adopted the TOU method or the A&P method. Attached to this testimony as Schedule JAB-S1 is the data request response submitted to SIEUA and AGP. In that proceeding, Mr. Brubaker was the witness hired by SIEUA and AGP. The Staff also discussed those cases in its prehearing brief filed in Case No. EO-2002-384. A copy of the portion of that brief where these cases are discussed is attached to this testimony as Schedule JAB – S2.

Q. Schedule 2 COS-R to Mr. Brubaker's rebuttal testimony purports to show that Staff's 12 NCP A&P method allocates significantly more capital costs to the Large Power class than other approaches he characterizes as being "traditional." Do you have a response?

A. Yes. Mr. Brubaker does not indicate what method or methods he considers to be "traditional." He merely states that the capacity costs allocated to each class under the "traditional" allocation methods are the same. What he doesn't state, is that his 3 NCP A&E method allocates average capacity costs. Even though the implication is that his 3 NCP A&E method is "traditional," Mr. Brubaker did not include his own study's results in his comparison of capacity costs on Schedule 2 COS-R. In calculating his unnamed (not his A&E method) "traditional" method, Mr. Brubaker simply finds the average total Missouri retail cost per kW and cut and pastes this result for each class. He then applies Staff's demand and energy allocators to total generation capacity and energy costs and compares the results to the average he calculated. Staff has taken Mr. Brubaker's Schedule 2 COS-R and added a section that includes a comparison of Mr. Brubaker's A&E method, similar to what Mr. Brubaker did utilizing Staff and OPC's demand and energy allocators.

Q. What conclusions do you draw from Staff's analysis?

A. As Mr. Brubaker correctly points out in his rebuttal, there is no significant difference among classes as to the energy costs. However, there is a difference in each class' generation capacity costs. While Mr. Brubaker claims that Staff's 12 NCP A&P method allocates 27% more capital costs to the Large Power class than under the "traditional" method (again, not Mr. Brubaker's A&E method), Mr. Brubaker's 3 NCP A&E method allocates 30% more capacity costs to the residential class than under the "traditional" method and 43% less capacity costs to the Large Power class than under the "traditional" method.

Q. Where did you get the demand and energy allocators you inserted into Mr. Brubaker's Schedule 2 COS-R?

A. I used the demand and energy allocators provided by Mr. Brubaker on Schedule 3 of his direct testimony, line 4 and line 6.

Q. What do you conclude from your analysis?

A. This analysis shows that Mr. Brubaker's preferred method (3 NCP A&E) benefits the Large Power class at the expense of the residential consumer. Attached to this testimony is Schedule JAB - S3 which adds Mr. Brubaker's 3 NCP A&E method to Mr. Brubaker's Schedule 2 COS-R.

Q. Do you agree with Mr. Brubaker's statement on page 7, lines 12 through 17, of his rebuttal testimony, "Methods that have not had the benefit of that analysis and withstood the test of time must be viewed with skepticism, and proponents of such methods bear a special burden of proving that they do a more accurate job of identifying cost-causation than do recognized methods, and **are not merely ad hoc creations designed to simply support a particular result desired by the analyst."** (Emphasis added)?

A. Yes, This is a principle that that Staff adheres to in conducting its studies and, in part, why the Staff used its 12 NCP A&P method.

Q. What class does Mr. Brubaker's study favor?

A. The members of the Large Power Class, which includes most of his clients in this case.

Q. On pages 5 and 6 of his rebuttal testimony Mr. Brubaker criticizes Staff's use of 12 monthly noncoincident peaks in performing its A&P method. Why is it more appropriate to use 12 monthly noncoincident peaks rather than just the noncoincident peaks in the summer months?

A. As I mentioned in my rebuttal testimony, an electric utility's system is designed to meet the demands in every day of every week of every month of the year, not just the demands made upon it in a few months in the year. The system is also designed to take into account maintenance and potential outages. Using 12 months takes these factors into consideration whereas simply using a three or four month snapshot does not. Therefore, using 12 monthly noncoincident peaks is more appropriate.

Q. Does this conclude your surrebuttal testimony?

A. Yes.

AQUILA NETWORKS, INC. D/B/A AQUILA MPS AND SJLP
EO-2002-384
Data Request
of
SIEUA and AGP
to
Missouri Public Service Commission Staff
September 27, 2005

Item No. Description

3. At page 12 of his testimony, line 14, Mr. Busch states that "The TOU allocation methodology has been favored by past Commissions." With respect to this statement, please:

a. Describe fully the TOU allocation methodology that has been favored by past Commissions.

Staff Response:

It is my understanding that past Commissions have expressed the position that costs are caused by the utilization of the system each hour and the proper method of allocating those costs is on an hourly basis. I believe that hourly data was not available in those cases, and the Staff's "Average and Peak" method using 12 Class Peaks was adopted as most closely approximating the more preferable hourly TOU method.

b. Compare each element of methodology with the methodology being proposed in this proceeding.

Staff Response:

As I stated in response to part a, the Commission adopted a principle, not a methodology. The methods used by the Staff in this case are based on that principle, and are made possible by the availability of hourly class load data in this case.

c. Provide citations and copies of relevant portions of Orders for each instance in which the TOU allocation methodology was favored by past Commissions.

Staff Response:

The following is a list of case number, name of utility and date of Commission Orders that I'm aware of:

(1) Case No. ER-81-364 (Arkansas Power & Light Company), April 20, 1982
(2) Case No. EO-78-161 (Kansas City Power & Light Company), February 28, 1983
(3) Case Nos. EO-85-17 and ER-85-160 (Union Electric Company), March 29, 1985

"...The Commission has indicated in recent cases that it believes the TOU [time of use] cost of service study most closely reflects cost causation of a utility's production and transmission facilities. Staff presented the same method to the Commission in Case No. ER-81-364 involving Arkansas Power & Light Company (AP&L), issued April 20, 1982. In that case, the Commission was presented with the same question of which theory properly reflected cost causation, TOU or CP. The Commission adopted the TOU/AP method. The Commission also adopted the TOU over the CP method of allocating costs in Case No.EO-78-161, which involved Kansas City Power & Light Company....The Commission considers its reasoning from the AP&L case to be supported by the evidence in this case. The Commission reaffirms its position that costs are caused by the utilization of the system each hour, and the proper method of allocating these costs is on an hourly basis. Here, as in AP&L, there is no hourly load data, so Staff's study utilizing TOU monthly data and AP [average and peak] allocation within the month is found to most closely approximate the more preferable hourly TOU... " [Case Nos. EO-85-17 and ER-85-160, pages 154-155]

The attached or above information provided to the requesting party or parties in response to this data or information request is accurate and complete and contains no material misrepresentations or omissions, based upon present facts to the best of the knowledge, information or belief of the undersigned. The undersigned agrees to immediately inform the requesting party or parties if during the pendency of this case any matters are discovered which would materially affect the accuracy or completeness of the attached information and agrees to regard this as a continuing data request.
As used in this request the term "document" includes publications in any format, work papers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data recordings, transcriptions and printer, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to the party to whom this request is tendered and named above and includes its employees, contractors,
agents or others employed by or acting in its behalf.

Signed: James C Watkins

Date: 10/14/05

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the 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

STAFF'S PREHEARING BRIEF

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November 4, 2005

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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

STAFF'S PREHEARING BRIEF

EXECUTIVE SUMMARY

ALLOCATION OF GENERATION-RELATED COSTS

In this section of the brief, the Staff sets forth its factual support and argument for why the most appropriate manner of allocating fixed generation costs to customer classes is on a time-of-use basis, which involves the consideration of customer class contribution to generation demand for every hour of the year, rather than solely at the hour of generation peak demand.

ALLOCATION OF TRANSMISSION-RELATED COSTS

In this section of the brief, the Staff presents its factual support and arguments for why transmission costs should be allocated to customer classes on the same basis that generation costs are allocated to customer classes.

PRIMARY DISTRIBUTION COST ALLOCATION METHOD

In this section of the brief, the Staff presents its factual support and arguments for why that portion of primary distribution costs that is identified in the class cost-of-service studies as being length- or customer-related should be allocated on density-weighted customer numbers.

DETERMINATION AND IMPLEMENTATION OF INTER-CLASS REVENUE ADJUSTMENTS

In this section of the brief, the Staff presents its factual support and arguments for why inter-class revenue adjustments should not be determined in this case and, instead should be determined and implemented in Aquila, Inc.'s current rate case, Case No. ER-2005-0436.

COMBINATION, ELIMINATION OR ADDITION OF RATE SCHEDULES

In this section of the brief, the Staff presents its factual support and arguments for when rate schedules should be combined, and states which modifications Aquila proposes that the Staff does not oppose.

CHANGES TO RATE STRUCTURES ON EACH RATE SCHEDULE

In this section of the brief, the Staff presents its rationale and support for why the changes Aquila proposes to the rate structures on each rate schedule are inappropriate.

DETERMINATION OF RATE VALUES

In this section of the brief, the Staff presents its position that each rate value on the current rate schedules for each customer class should be increased by the same percentage amount the Commission determines is appropriate to move that class closer to its cost of service.

CONCLUSION

In this section of the brief, the Staff presents its recommendation to the Commission that the Commission only determine in this case the appropriate allocation factors to be used in a class cost-of-service study and explains why it makes that recommendation.

COST-OF-SERVICE ISSUES

ALLOCATION OF GENERATION-RELATED COSTS

This case begins with the premise that the costs Aquila, Inc. incurs to serve each customer class—a group of customers that have similar characteristics—should be matched to the revenues Aquila gets from that group of customers. In this case the Staff, Aquila, Public Counsel and a group of parties—AG Processing, Inc., FEA, SIEUA—each sponsor a different approach for how to estimate the costs Aquila incurs to serve each customer class. The most significant issue between them in estimating the costs Aquila incurs to serve each customer class is found in the first stated issue on the list of issues: What is the appropriate method for allocating generation-related costs to customer classes?

The Staff's position is that its time-of-use method which (1) spreads each increment of fixed generation capacity costs equally across the entire time period where that capacity is used and (2) matches usage costs to when they are incurred is the appropriate method for allocating generation-related costs to customer classes.

Unlike the Staff, the witnesses of Aquila, AG Processing, Inc., the Federal Executive Agencies and the Sedalia Industrial Energy Users' Association promote the use of a generation cost allocation method that relies on maximum capacity requirements Aquila must meet during the year, *i.e.*, a peak responsibility method. (Staff witness Watkins Rebuttal, p. 1, l. 22 to p. 2, l. 4; p. 3, ll. 8-19).

The evidence and argument in this case will show that, because production-capacity costs are determined by loads throughout the year, each class's contribution to the sum of the class loads in each hour should be used to allocate hourly production-capacity costs. For consistency, and because production-energy costs also vary throughout the year, each class's contribution to the sum of class loads in each hour should be used to allocate hourly production-energy costs.

The electricity a utility provides to its customers must be created essentially instantaneously with when the customers use that electricity. (AG Processing, Inc./FEA/SIEUA witness Brubaker Direct, p. 4, ll. 14-21). Therefore, electric utilities must have sufficient generation capacity available to serve their customers at any given moment. The types of generating plants an electric utility relies on to supply that capacity at any given moment primarily depends on what mix of plants produces the least-cost electricity given the operational constraints of the plants, the costs of the plants and the costs of the energy sources the plants convert into electricity. (Staff witness Watkins Rebuttal, p. 2, ll. 6-9; p. 3, l. 21 to p. 4, l. 3, p. 4, ll. 4-12).

In allocating generation-related costs to customer classes, the Staff does not discriminate between customers in terms of the cost of the generation required to serve those customers at any given point in time. In this case the Staff had sufficient data to allocate generation costs in each hour of the year to customer classes, hour-by-hour. (Staff witness Watkins Direct, p. 5, ll. 8-18). With the Staff's method, the generation costs assigned to each customer class in each hour is based only on the amount of electricity that customer class uses in that same hour. The Staff's method, in each hour of the year, allocates to the customer classes Aquila's costs related to generation used in that hour to meet the electricity demands of the customers in those classes in that same hour, based on the electricity used by each customer class in that hour.

In three cases decided in the early and mid-1980s the Commission adopted the position the Staff takes here. In each case, the issue was both significant and hotly contested. The first

KANSAS CITY POWER & LIGHT - MISSOURI

COMPARISON OF STAFF'S, OPC'S, AND INDUSTRIAL'S GENERATION CAPACITY AND ENERGY CLASS REVENUE REQUIREMENTS WITH TRADITIONAL ALLOCATION METHODOLOGY

	Traditional Method				Staff COSS				OPC COSS				OPC TOU-COSS				Industrial 3NCP A&E - COSS			
	Capacity Rev Req.		Energy Rev Req.		Capacity Rev Req.		Energy Rev Req.		Capacity Rev Req.		Energy Rev Req.		Capacity Rev Req.		Energy Rev Req.		Capacity Rev Req.		Energy Rev Req.	
Customer Class	Capacity Costs $ per KW	% Difference From System Avg.	Energy Costs ¢ per kWh	% Difference From System Avg.	Capacity Costs $ per KW	% Difference From System Avg.	Energy Costs ¢ per kWh	% Difference From System Avg.	Capacity Costs $ per KW	% Difference From System Avg.	Energy Costs ¢ per kWh	% Difference From System Avg.	Capacity Costs $ per KW	% Difference From System Avg.	Energy Costs ¢ per kWh	% Difference From System Avg.	Capacity Costs $ per KW	% Difference From System Avg.	Energy Costs ¢ per kWh	% Difference From System Avg.
Total MO Retail	108		1.90		108		1.90		108		1.90		108		1.90		108		1.90	
Residential	108	0%	1.90	0%	87	-19%	1.94	2%	84	-22%	1.89	-1%	77	-29%	1.97	4%	140	30%	1.94	2%
Small GS	108	0%	1.90	0%	106	-2%	1.94	2%	103	-5%	1.90	0%	101	-6%	1.90	0%	114	6%	1.94	2%
Medium GS	108	0%	1.90	0%	108	0%	1.94	2%	107	-1%	1.92	1%	106	-2%	1.93	2%	109	1%	1.94	2%
Large GS	108	0%	1.90	0%	125	16%	1.93	2%	125	16%	1.92	1%	129	19%	1.89	-1%	85	-21%	1.93	2%
Large Power	108	0%	1.90	0%	137	27%	1.89	0%	140	30%	1.90	0%	152	41%	1.84	-3%	62	-43%	1.89	-1%