Exhibit No.:	______________
Issue(s):	Class Cost of Service & Rate Design
Witness/Type of Exhibit:	Meisenheimer/Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	ER-2006-0314

REBUTTAL TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of the Office of the Public Counsel

KANSAS CITY POWER & LIGHT COMPANY

CASE NO. ER-2006-0314

September 15, 2006

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) **ER-2006-0314**
Charges for Electric Service to Begin the)
Implementation of Its Regulatory Plan)

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
ss
COUNTY OF COLE)

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

1. My name is Barbara A. Meisenheimer. am Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of 14 pages

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Barbara A. Meisenheimer

Subscribed and sworn to me this 15th day of September 2006.

KATHLEEN HARRISON
Notary Public - Notary Seal
State of Missouri - County of Cole
My Commission Expires Jan. 31, 2010
Commission #06399239

Kathleen Harrison
Notary Public

My Commission expires January 31, 2010.

REBUTTAL TESTIMONY

OF

BARBARA MEISENHEIMER

KANSAS CITY POWER & LIGHT

CASE NO. ER-2006-0314

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O. 2230, Jefferson City, Missouri 65102.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?

A. Yes, I submitted direct testimony on cost of service and rate design issues on August 22, 2006, and supplemental direct testimony updating my class cost of service study and rate design on September 08, 2006.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to response to the cost of services studies and rate design recommendations of Kansas City Power & Light (KCPL or the Company), the Public Service Commission Staff (Staff) and the intervenors.

Q. IN PREPARATION OF YOUR TESTIMONY, WHAT MATERIALS DID YOU REVIEW?

A. I have reviewed the direct testimony filed by George McCollister, Lois Liechti, and Laura Becker on behalf of KCPL, the direct testimony of James Busch and Janice Pyatte filed on behalf of the Staff, and the direct testimony of Maurice Brubaker filed on behalf of Ford, Praxair and the Missouri Industrial Energy Consumers (Industrial), the direct testimony of James Selecky on behalf of Wal-Mart, the direct testimony of Joseph Herz on behalf of Trigen-Kansas City Energy Corp., and the direct testimony of Gary Price on behalf of The Department Of Energy – National Nuclear Security Administration.

I. CLASS COST OF SERVICE

Q. WHAT TIME PERIODS DO THE COST STUDIES COVER?

A. It appears that all the cost studies other than OPC's are based on a year ending September 30, 2005. My studies attempt to update information to reflect the test year ending December 31, 2005.

Q. WHY DID YOU ATTEMPT TO USE INFORMATION UPDATED TO DECEMBER 2005?

A. I was attempting to conform to the time period specified as the required period KCP&L's class cost of service study was to cover as stated on pages 33-34 of the Stipulation and Agreement in Case EO-2005-329 regarding KCP&L's Regulatory Plan.

Q. HAVE YOU PREVIOUSLY UPDATED YOUR CLASS COST STUDY IN THIS PROCEEDING?

A. Yes. On September 8, 2006, I filed changes to the CCOS studies. There were three changes. The first corrected a computation error related to the distribution of depreciation reserves. The second incorporated customer maximum demands for primary and secondary customers. The final change adjusted the revenues for the lighting class.

Q. HAVE YOU BEEN MADE AWARE OF ADDITIONAL ISSUES THAT WOULD REQUIRE OTHER CHANGES TO YOUR STUDIES?

A. Yes. I am currently aware of two issues. The first relates to the level of class revenues for some large customers. I understand that Staff and the Company are attempting to resolve this issue. The second relates to Staff's direct testimony suggesting the need to factor up the Company's reported peak demands to reflect losses when calculating the production capacity allocation factor.

Q. HAVE YOU DETERMINED HOW THE LARGE CUSTOMER REVENUE ISSUES MIGHT AFFECT YOUR COST STUDY RESULTS?

A. At this time, I do not know the large customer revenue adjustments that need to be made to my studies so I can not predict the impact.

Q. WITH RESPECT TO THE SECOND ISSUE DID YOU ORIGINALLY USE COMPANY PROVIDED CLASS PEAKS THAT WERE CHARACTERIZED AS INCLUDING LOSSES?

A. Yes, I did. Those peaks appear in the direct testimony of Company witness Dr. McCollister on schedules GMM-2 and GMM-3.

Q. HAS DR. MCCOLLISTER FILED UPDATED PEAKS IN THIS PROCEEDING?

A. Not to my knowledge.

Q. IF DR. MCCOLLISTER AFFIRMS THAT THE PEAKS SHOULD BE ADJUSTED TO REFLECT THE LOSSES SUGGESTED BY STAFF IN THIS PROCEEDING WOULD IT AFFECT YOUR RESULTS?

A. Yes, to some degree. To quantify the impact I recalculated my 12 NCP A&P allocation factor based on peak demands adjusted for losses as reported by the Staff. The adjustment has little impact on either the class allocators or the revenue neutral shifts produced by my study. The table below summarizes the impacts.

Table 1. Impact of Loss Adjustment

	RES	SGS	MGS	LGS	LPS	SC	Lights
Production Capacity Factor with Losses	0.3247	0.0552	0.1173	0.2450	0.2471	0.0006	0.0100
Production Capacity Factor w/o Losses	0.3238	0.0552	0.1171	0.2450	0.2483	0.0006	0.0100
Revenue Neutral Shift with Losses	5.21%	-15.03%	-12.75%	-1.95%	7.01%	40.83%	1.63%
Revenue Neutral Shift w/o Losses	5.07%	-15.06%	-12.83%	-1.95%	7.34%	40.82%	1.49%

II. COMPARISON OF CLASS COST OF SERVICE STUDIES

Q. PLEASE COMPARE THE RESULTS OF THE PARTIES' CLASS COST STUDIES.

A. Table 2 provides a comparison of each party's revenue neutral increase or decrease as a percentage of revenue.

Table 2. Comparison of Revenue Neutral
Rate Revenue Increase/Decrease Percentages

	RES	SGS	MGS	LGS	LPS	SC	Lights
OPC	2.07% to 5.07%	-15.06 to -15.92%	-12.83% to -12.85%	-.58% to -1.95%	7.34% to 12.07%	37.60% to 40.82%	-6.28% to 1.49%
Staff	7.82%	-4.03%	-9.59	--2.76%	-2.97%		
KCPL	7.45%	-2.99%	-9.04%	-4.6%	-2.29%		10.30%
Praxair, Ford, MIUG	22.94% to 25.19%	-3.53% to -7.88%	-9.83% to -11.88%	-11.85% to -13.01%	-17.13% to -19.92%		-20.99% to -21.00%
Wal-Mart	20.72% to 21.73%	-0.65% to -4.6%	-10.66% to -12.22%	-11.85% to -12.41%	-14.71% to -14.78%		-9.31%

Staff's results are shown on Schedule JAB-2 of the direct testimony of James Busch. The Industrial results appear in Schedules 4 through 7 of the direct testimony of Maurice Brubaker. The Wal-Mart results appear in Schedules JTS-3 and JTS-4 of the direct testimony of James Selecky. KCP&L's are shown on Schedule LJL-1 Lois Liechti's direct testimony.

Q. WHAT ARE THE PRIMARY FACTORS THAT CAUSED DIFFERENCES IN THE PARTIES' RESULTS?

A. I believe that there are two primary factors that contribute to the differences in the parties' study results: (1) the classification and allocation of distribution plant costs and (2) the allocation of production and transmission plant costs.

Q. PLEASE PROVIDE THE DIFFERENCES IN THE CLASSIFICATION AND ALLOCATION OF DISTRIBUTION PLANT COSTS.

A. All the parties that prepared a CCOS study, including OPC, functionalized distribution costs in Accounts 364 (Poles Towers and Fixtures), 365 (Overhead Conductors & Devices), 366 (Underground Conduit) and 367 (Underground Conductors & Devices) in a manner that recognizes a distinction between primary and secondary voltage. All parties, except OPC, then classified both primary and secondary distribution as having a customer related component as well as a demand related component. I allocated secondary distribution based on both a customer and demand component, but I allocated primary distribution based only on demand.

Q. WHY CAN THE SECONDARY DISTRIBUTION PORTIONS OF ACCOUNTS 364-367 BE CONSIDERED CUSTOMER RELATED AND DEMAND RELATED WHILE PRIMARY DISTRIBUTION SHOULD BE CONSIDERED ONLY DEMAND RELATED?

A. The distribution plant associated with Accounts 364-367 includes facilities such as conductors, poles and conduits. Generally, these facilities are jointly used. The more removed from the customer and the more flexible these facilities are, the less appropriate it is to characterize the associated cost as customer related. The

January 1992, NARUC manual describes "customer costs" as costs that are directly related to the number of customers served.

There are a number of reasons that a portion of the cost of facilities serving at secondary voltage can reasonably be classified as customer related while facilities serving at primary voltage should not. First, from a network perspective, most residential and business customers receive electricity from secondary distribution lines. Therefore, these facilities are most closely linked to customers and are less likely to have flexibility in alternative service arrangements. Next, secondary (defined as service provided at lower voltage) is less able to accommodate a large number of users and is again therefore less flexible. Third, the existence of the customer is not evidence of cost causation for most of the distribution facilities and there may be very little correlation between distribution cost and customer numbers:

> "Many electric utility cost analysts allocate substantial portions of distribution investment and costs to the consumer function. The allocations are based on a theory of a minimum system to serve nominal load. The theory assumes that these costs vary directly with the number of consumers served. This "phantom" system concept ignores density factors and rests on the supposition of a system that would not be built and that, in fact, would serve little purpose were it built. We have never seen a study that showed a direct correlation of unit costs with consumer growth on an electric distribution system. Our regression analyses prove that the "phantom" system concept is not correct and that distribution cost changes are caused by many factors."
>
> Davis J. Lessels, *Public Utilities Fortnightly*, Vol. 106 (#12), 37 at 39 (1980)

When a new customer is connected to the system both the number of customers and the customer density change. However, the system may or may not need any new poles, conduits, conductors or transformers. In other words, within the service area of the Company, the addition of a new customer will not necessarily cause new investment in poles, conduits, conductors or transformers. The need for incremental investment in primary distribution facilities in order to serve each new customer is even less likely to be directly to cost than for secondary distribution facilities. There are, however, numerous combinations of different numbers of customers that may produce the same resultant demand. The projected level of demand, rather than the number of customers is the primary driver of costs.

Q. IS THERE EVIDENCE THAT DISTRIBUTION COSTS IN ACCOUNT NOS. 364-367 MAY NOT BE DIRECTLY CORRELATED WITH CUSTOMER NUMBERS?

A. Yes. As supported by David Lessels, a former chief of the Electric Rates Branch of the Rural Electrification Administration, in an investigation into the relationship between distribution investment costs for electric cooperatives and the number of customers:

> "Year-round farm and residential consumers on the rural distribution systems comprise more than 85 percent of the total consumer population. Regression analyses were done, using as independent variables: change in year-round farm and residential consumers, change in irrigation customers, and change in all other consumers. Distribution plant per consumer was consistently found to be inversely correlated with change in year-round farm and residential consumers. There were positive correlations with changes in irrigation consumers and unit size of distribution plant. For all other consumers the correlations were not consistent and significance levels were often low."
>
> Lessels, supra, 38

Q. WHAT IMPACT DOES THE METHOD OF ALLOCATING PRODUCTION AND TRANSMISSION COSTS HAVE ON THE PARTIES' STUDY RESULTS?

A. Differences in the method of allocating production and transmission plant is a significant factor in explaining the difference in the parties' class cost of service results. I allocated the production and transmission plant based on a time of use (TOU) allocator in one study and on a 12 month non coincident peak in my second study. I believe that conceptually the TOU method is the most appropriate method for the allocation of production and transmission plant. Public Counsel has previously chosen a 12 NCP Average and Peak method as a reasonable proxy of TOU allocators. The Company used an Average and Peak allocator and Praxair chose to use an Average and Excess (A&E) method.

Q. ON PAGE 20 OF MR. BRUBAKER'S DIRECT TESTIMONY, MR. BRUBAKER STATES THAT THE A&E METHOD IS ONE OF THE TWO MOST PREDOMINATELY USED METHODS IN THE INDUSTRY. ALONG WITH THE PEAK RESPONSIBILITY METHOD THEY ARE THE MOST WIDELY ACCEPTED AND UTILIZED METHODS FOR DETERMINING CLASS COST OF SERVICE. WHY DOES PUBLIC COUNSEL BELIEVE THAT THE A&E METHOD IS NOT APPROPRIATE FOR ALLOCATING PRODUCTION AND TRANSMISSION PLANT IN THIS CASE?

A: It is true that the peak responsibility method had been used widely in the past when utility analysts believed that production plant costs were driven only by system peak demands. However, over time it became apparent that hours other than the peak hour were critical from the system planner's perspective. Different types of electric production plant have different fixed costs and variable costs. For example, base load plants tend to be large and expensive-to-build machines that burn low-cost fuels while peaking units are generally inexpensive to build but have relatively high fuel costs. An electric utility needs to plan its production facilities to minimize the total system cost given the system load for the entire year. In other words, production cost is determined by the optimal planning capacity mix of base load, intermediate and peaking capacities. Many factors are considered in system planning, including the system utilization around the year as well as the planned maintenance needs and risk of forced outages. Therefore, it is inappropriate to simply attribute all production cost to the few hours when customers' usage peaks.

Similarly, it is also not appropriate to attribute all transmission plant cost to a few peak hours. KCPL has significant peak demands outside the period June through August. Table 3 shows the ordered Company's system coincident peaks from October 2004 to September 2005. We can see that during the twelve months, five months have loads that are at least 75% of the system peak. It would not be appropriate to attribute all demand related production or transmission plant cost to one single month simply because that month happens to have the highest peak and to assume that there are no transmission plant costs associated with all the other months.

Table 3. KCP&L MO Coincident Peak Demands

Month	Jul-05	Aug-05	Jun-05	Sep-05	May-05	Dec-04	Jan-05	Feb-05	Oct-04	Nov-04	Mar-05	Apr-05
CP Demand	2007	1914	1902	1623	1557	1340	1365	1318	1237	1245	1185	1114
% of Peak	100%	95%	95%	81%	78%	67%	68%	66%	62%	62%	59%	56%

Over time, regulators and utility analysts have tended to agree that more factors than the peak demand should be considered in the allocation of electric production and transmission cost. The A&E method attempts to account for the annual energy supply needs of the company in addition to the capacity needs by dividing the total cost into two parts based on the system load factor and allocating the average usage portion based on average annual usage. However, by allocating demand-related cost based on excess demand instead of total demand, this method generally produces allocators that are similar to a single peak responsibility allocator. In other words, allocators resulting from this method tend to ignore annual usage patterns.

Q. PLEASE EXPLAIN WHY PUBLIC COUNSEL BELIEVES THAT THE TOU METHOD AND THE 12NCP AVERAGE AND PEAK METHOD ARE MORE APPROPRIATE FOR ALLOCATING PRODUCTION AND TRANSMISSION PLANT IN THIS CASE?

A. A TOU methodology is fair because it allocates total system costs in accordance with the hour-by-hour usage made of the system by the different customer classes. In a TOU methodology, the production and transmission costs are allocated to the hours of the year that each resource is actually running. This kind of allocation methodology is equitable because every customer, large or small, residential or industrial, receives exactly the same cost allocation as every other customer taking service in any given hour. It is only the difference in the timing of usage for each class that results in differences in the costs allocated to the classes for the entire year. In previous electric cases, the Commission has accepted the TOU method as the most reasonable method for allocating the production costs of serving the various classes[1].

In cases when the hourly information is not available, I believe that a 12 NCP average and peak method is a reasonable proxy. This method basically allocates

[1] See Report and Order on Case No. EO-85-17/EO-85-160, p. 148, for an example.

production and transmission costs to all months in accordance with the monthly system relative usage by different customer classes. In addition, an annual energy usage factor is also used to account for the energy supply need in addition to the monthly peak demand need. Based on my experiences in previous cases, this method generally produces close approximations to the TOU allocators.

III. RATE DESIGN RECOMMENDATIONS

Q. HOW DID YOUR DIRECT TESTIMONY RECOMMEND THAT THE COMMISSION ACCOMMODATE FACTORS SUCH AS AFFORDABILITY, RATE IMPACT, AND RATE CONTINUITY IN DETERMINING RATE DESIGN?

A. I recommended that the Commission adopt a rate design that balances movement toward cost of service with rate impact and affordability considerations. To reach this balance, I believe that in cases where the existing revenue structure departs greatly from the class cost of service, the Commission should impose, at a maximum, class revenue shifts equal to one half of the "revenue neutral shifts" indicated by Public Counsel's Class Cost of Service studies. Revenue neutral shifts are shifts that hold overall company revenue at the existing level but allow for the share attributed to each class to be adjusted to reflect the cost responsibility of the class. In addition to moving half way to the revenue neutral shifts, I recommend that if the Commission determines that an overall increase in revenue requirement is necessary, then no customer class should receive a net decrease as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue increase that is applied to that class. Likewise, if the Commission determines that an overall decrease in revenue requirement is necessary, then no customer class should receive a net increase as the combined result of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total revenue decrease that is applied to that class.

Q. BASED ON YOUR REVIEW OF THE OTHER PARTIES' RATE DESIGN RECOMMENDATIONS AND THE UPDATED RESULTS OF YOUR COST STUDIES, WHAT IS YOUR POSITION REGARDING INTERCLASS REVENUE SHIFTS?

A. While Public Counsel could support the Company's original proposal for an equal percent increase based on considerations of rate affordability, we do recognize that our studies and the Staff study are consistent with a modest interclass adjustment and we are willing to make such an adjustment in this case.

Q. WHY ARE YOU WILLING TO ACCEPT AN ADJUSTMENT IN THE CURRENT CASE?

A. Public Counsel generally supports measured movement toward class cost of service subject to consideration of rate impacts and affordability. Based on the Stipulation and Agreement in EO-2006-329, no cost studies will be performed and no rate structure changes will be made prior to the 2009 rate case. Specifically, the Signatory Parties' agreed not to file new or updated class cost of service studies or to propose changes to rate structures in Rate Filing #2, (Section III.B.3.b.(iv)) or Rate Filing #3 (Section III.B.3.c.(iv)).

Q. WHAT LEVEL OF REVENUE NEUTRAL SHIFTS WOULD YOU ACCEPT?

A. The Staff proposes a revenue neutral increase to residential of 4.95%. Although this number is higher than my proposal, it is not inconsistent with the upper range of the results of my cost studies. Public Counsel continues to support moving residential rates no more than halfway to the revenue neutral shifts indicated by the range resulting from my cost studies. At a maximum that would be about

2.5%. In the event the Commission rejects our proposal, then we view Staff's 4.95% proposal as the next best alternative.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.