KCP&L-242

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Issues:	Class Cost-of-Service Rate Design
Witness:	Michael S. Scheperle
Sponsoring Party:	MO PSC Staff
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File No.:	ER-2010-0355
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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

MICHAEL S. SCHEPERLE

KANSAS CITY POWER & LIGHT COMPANY

FILE NO. ER-2010-0355

Jefferson City, Missouri
December 2010

Staff Exhibit No. KCP&L-242
Date 1/18/11 Reporter LMB
File No. ER-2010-0355

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 Continue the Implementation of Its Regulatory Plan	)))))	File No. ER-2010-0355

AFFIDAVIT OF MICHAEL S. SCHEPERLE

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

Michael E. Scheperle, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 10 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal 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.

Michael S. Scheperle
Michael S. Scheperle

Subscribed and sworn to before me this 9th day of December, 2010.

SUSAN L. SUNDERMEYER
Notary Public - Notary Seal
State of Missouri
Commissioned for Callaway County
My Commission Expires: October 03, 2014
Commission Number: 10942086

Susan L. Sundermeyer
Notary Public

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Q. Please state your name and business address.

A. My name is Michael S. Scheperle and my business address is Missouri Public Service Commission (Commission), P. O. Box 360, Jefferson City, Missouri 65102.

Q. Are you the same Michael S. Scheperle who filed on November 17, 2010, direct testimony in question and answer format and as part of the Missouri Public Service Commission Staff's (Staff's) Class Cost-of-Service and Rate Design Report?

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. I explain why the class cost-of-service (CCOS) studies of Kansas City Power & Light Company (KCPL), the U.S. Department of Energy (DOE), and the group consisting of Ford Motor Company, Midwest Energy Users Association (Alliant Techsystems, Inc., Wal-Mart Stores, Inc., United States Gypsum Company, LaFarge North America, Inc., Cargill Incorporated, Archer Daniels Midland Company, Best Buy, Inc., General Mills, Boulevard Brewing Co., DST Realty, Inc., and Broadway Square Partners, LLP), Missouri Industrial Energy Consumers, and Praxair, Inc. (the Industrials) are inappropriate and, therefore, lead to rate design recommendations the Commission should not rely on. As part of that explanation I compare the results of the CCOS studies parties presented in direct testimony in this case. I also address a Southern Union Company d/b/a Missouri Gas Energy (MGE) rate design

recommendation to eliminate certain residential rate schedules, the Industrials' proposal for intraclass revenue shifts between the Large General Service (LGS) and Large Power Service (LPS) rate schedules, and other issues related to CCOS studies raised by various parties. I specifically address:

- Production-Capacity Allocator
- Production Fuel Allocator
- Off-System Sales Allocator
- Rate Design Recommendations
- Proposed certain residential rate schedule elimination
- Intraclass Revenue shifts

Q. Who are the witnesses for KCPL, DOE and the Industrials that presented CCOS studies?

A. Paul M. Normand, Dr. Dennis Goins and Maurice Brubaker, respectively.

Q. Who is the witness for MGE that sponsors eliminating certain residential rate schedules?

A. Michael R. Noack.

Q. Who is the Industrials' witness that proposes intraclass revenue shifts between LGS and LPS rate schedules?

A. Maurice Brubaker

Class Cost-of-Service Study Allocators

Q. Did all the parties who presented CCOS study results use the same allocators in their CCOS studies?

A. No.

Q. What is Staff's response to the allocators the other parties used?

A. Staff disagrees with a number of allocators that other parties used; Staff has significant disagreement with the allocators used for 1) Production-Capacity, 2) production fuel cost, and 3) Off-System sales margins.

Production-Capacity Allocator

Q. What is Production-Capacity?

A. Production-Capacity costs are rate base investment and related production expenses associated with the facilities necessary to supply a customer's service requirements during periods of maximum, or peak levels of power consumption per month. Production-Capacity is the ability of the power system components to adequately serve the system load requirements.

Q. What Production-Capacity allocation methods did the parties use for the studies presented in this case?

A. KCPL used a Base, Intermediate and Peak Method (BIP); Staff used a related – but distinct – BIP Method; the Industrials used an Average and Excess (A&E) 4-non-coincident peak (NCP) method, an A&E 2-NCP method, and also a 4 coincident peak (CP) method; and DOE used a related – but distinct – 4 CP method. The Industrials' primary recommendation to the Commission is for it to use its Average and Excess 4-NCP method for deriving the Production-Capacity allocator. Additional Production-Capacity allocators which were not used in this case are described in Staff's Appendix A to its Class Cost of Service and Rate Design Report.

Q. Does Staff agree with KCPL's BIP method for deriving the Production–Capacity allocator?

A. No. Although both KCPL and Staff used a BIP method to allocate production investment and costs, Staff disagrees with KCPL's BIP method because Staff disagrees with how KCPL allocated the base, intermediate, and peak components.

Q. What aspect of how KCPL allocated the base, intermediate, and peak components does Staff disagree with?

A. The BIP methodology gives weight to both capacity and energy considerations. It does so by considering energy in the base component, through the allocation of base units to all classes, and by considering capacity in the allocation of intermediate and peak components.[1] This weighting enables the BIP method to consider the differences in the capacity/energy cost trade-off that exists across a company's generation mix.

Q. How did KCPL and Staff allocate Production-Capacity?

A. KCPL used the following to allocate Production-Capacity:

- Base - Lowest monthly kWh (non-zero usage) for each rate
- Intermediate - 12 CP Remaining less Base
- Peak - 4 CP remaining less Base less Intermediate

Staff used the following to allocate Production-Capacity:

- Base – Annual kWh usage at generation for each rate schedule
- Intermediate – 12 NCP average less Base
- Peak – 4 NCP remaining less Base and Intermediate

Q. Why does Staff use the Annual kWh usage at generation for each rate schedule to allocate Base Production- Capacity?

[1] Base generation facilities, typically coal and nuclear generation plants, are generally the most expensive to build. Base generation facilities generally have lower running costs than peaking generation facilities. Peaking generation facilities, typically combustion turbines, are generally the least expensive to build but use more expensive natural gas or oil as fuel to generate electricity. The output of peaking facilities can be changed quickly. Because of their low cost to build and their higher fuel cost, peaking units are only economic to run for a few hours of the year. Intermediate generation facilities fall between base and peaking generation facilities. The amount and type of each generation facility needed is unique to each utility's loads. However, all three types of generation facilities are needed to meet load at the minimum cost.

A. Staff uses annual kWh to define the base piece as all kWh (annual) at generation is allocated because it mitigates distortion of kWh usage that can result from the billing process.

Q. How does using the billed lowest month usage for each rate allow distortion?

A. Billing errors and the number of billing days in a particular month may distort the allocation factor if billed usage is used. These billing distortions typically occur in the large customer classes where an error in one customer's bill can impact the entire class's usage. Staff's choice of using the annual energy avoids these distortions.

Q. How did the Intermediate component and the Peak component allocators used by KCPL and Staff differ?

A. KCPL and Staff defined both the Intermediate component and the Peak component the same, except Staff used NCP while KCPL used CP.

Q. Why is use of NCP more appropriate for the Intermediate component and the Peak component?

A. Use of NCP ameliorates the impact of "free ridership." Free ridership is when service rendered completely off-peak is not assigned any responsibility for capacity costs. An example of free ridership that would occur with CP allocation is street lighting. Street lights are not on during the day and therefore would not be allocated any capacity costs at all if the coincident peak occurred during daylight hours and a CP allocator was used.

Q. Does Staff agree with the Industrials' method for deriving the Production – Capacity allocator?

A. No. The Industrials' filed three CCOS studies, two studies use A&E methods for Production-Capacity. The two A&E methods used are an A&E 4-NCP method and an

A&E 2-NCP method. The A&E method has two parts. The "average" piece is simply the total kWh usage divided by the total number of hours in the year for each class, while the "excess" piece is a measure of demand equal to each class's contribution to the system peak load (or to a specified group of system peak demands). The Industrials determine the excess piece by using either two or four non-coincident class peaks less the average portion already allocated to determine the "excess" piece.[2]

Q. How does the Production-Capacity allocator of the Industrials' NCP studies compare, methodologically, to Staff's BIP study?

A. The "Average" piece in the Industrials' A&E method is very similar to Staff's base piece in the BIP method, as both methodologies use the annual kWh at generation. The difference in approach between the A&E methodology and Staff's BIP methodology is in how the demand piece of the allocator is determined. For the demand piece of the Production-Capacity allocator, both Staff's BIP method and the Industrials' A&E method use NCP, but Staff's method separates the remaining capacity piece into two components, an intermediate component and peak component. KCPL's BIP method is identical to Staff's in these particular respects.

Q. Why do the A&E methods vary from the BIP methods for allocation of the demand piece of Production-Capacity?

A. The A&E methods are based on the assumption that additional generation facilities are only built to meet peak load demands. In contrast, the BIP method is based on the assumption that generation facilities are built to meet the entire load of the electric utility at all times. The BIP method allocates three types of electric generation facilities: base, intermediate, and peaking. Base generation facilities, typically coal and nuclear generation

[2] The 4NCP study uses the four non-coincident peaks, while the 2NCP uses only two non-coincident peaks.

plants, are generally the most expensive to build. Base generation facilities generally have lower running costs than peaking generation facilities. Peaking generation facilities, typically combustion turbines, are generally the least expensive to build, but use more expensive natural gas or oil as fuel to generate electricity. The output of peaking facilities can be changed quickly. Because of their low cost to build and their higher fuel cost, peaking units are only economic to run for a few hours of the year. Intermediate generation facilities fall between base and peaking generation facilities. The amount and type of each generation facility needed is unique to each utility's loads. However, all three types of generation facilities are needed to meet load at the minimum cost.

Q. Are additional generation facilities only built to meet peak load demands?

A. No. Generation facilities are built to satisfy the demand for electricity throughout the year at the lowest cost. The Industrials' A&E method is premised on an assumption that the amount of production plant capacity required by a utility is primarily determined by the peak usage during the year. If that were true, then the only appropriate generation facility to build to meet new load demands would be a peaking facility. If an electric utility's generation was only built to meet peak loads, it would never make any economic sense to spend billions of dollars to build a base generation facility. Since generation facilities are built to satisfy the demand for electricity throughout the year at the lowest cost, it is reasonable that part of the Production-Capacity allocator - the intermediate piece - be based on loads throughout the year. This is why the peak component of the BIP method may be allocated to satisfy the peak portion less the base and intermediate component already allocated to each class based on each class's usage characteristics.

Q. Why is the BIP method superior to the A&E method for allocating the Production-Capacity costs of a regulated electric utility?

A. Generation facilities are built to meet the entire load of the electric utility at every point in time. The BIP production allocator is a more reasonable approach because peak load is a function of the total loads of each class based on a base, intermediate and peak load requirement, not just the average and excess loads of each class.

Q. Does Staff agree with DOE's and Industrials' Production – Capacity allocator method using the 4CP method?

A. No. DOE and the Industrials' filed CCOS studies based on a 4 CP method. Staff agrees that KCPL is a summer peaking utility and CP information may be applicable and accurate; however, Staff is concerned that a study involving CP information could result in free ridership when service rendered to some customers completely, or mostly, off-peak. These customers then would be assigned very little, if any, responsibility for capacity costs. This explains the result of the 4CP study where the Lighting class Index of Return shows a 6.12 (revenue far exceeds cost to serve) in Schedule MSS-R1. Other CCOS studies - BIP for Staff and KCPL, and A&E 4-NCP and A&E 2-NCP from Industrials - show more modest Index of Returns for the Lighting class, alleviating free ridership concerns.

Fuel Cost Allocator

Q. Does Staff agree with KCPL's fuel cost allocation method?

A. No. KCPL allocates fuel cost on the basis of class energy (kWh) use. This concept ignores any matching of fuel costs with the allocation of Production-Capacity. The BIP method Staff used allocates a relatively larger share of expensive base load plant costs to each class based on each class's annual energy usage. Staff believes that each class's

allocated base load costs should receive the corresponding benefit of being allocated the lower base load fuel costs savings. The fuel costs of generation and purchased power costs are approximately $171.7 million of KCPL's total production costs of $267.1 million.

Off-System Sales Allocator

Q. Does Staff agree with KCPL's Off-System sales margins allocation method?

A. No. KCPL allocates off-system sales margins on the basis of the allocation of steam fixed generation plant or demand basis. Staff allocates off-system sales to customer classes on the basis of energy usage at the generation level by the customer class. The Commission adopted this energy allocation method in a KCPL case, Case No. ER-2006-0314, and in the recent Ameren Missouri Case, File No. ER-2010-0036. DOE and the Industrials also propose allocating off-system sales consistent with prior Commission rulings.

Comparison of CCOS Study Results

Q. What are the CCOS study results for KCPL's customers on Residential rate schedules, the Residential (RES) rate group, the Small General Service rate schedules, the Small General Service (SGS) rate group (small businesses), the Medium General Service rate schedules, the Medium General Service (MGS) rate group, and Large General Service rate schedules, the Large General Service (LGS) rate group?

A. Schedule MSS-R1 shows an Index of Return for all six studies for each of those rate groups.[3]

Q. What are the CCOS study results for the total RES class?

[3] An Index of Return above 1.0 indicates revenues from the customer class exceeds the cost of providing service to that class; therefore, to equalize revenues and cost-of-service, rate revenues should be reduced, i.e., the class has overpaid. An Index of Return below 1.0 indicates revenue from the class is less than the cost of providing service to that class; therefore, to equalize revenues, and cost-of-service, rate revenues should be increased, i.e., the class has underpaid.

A. Schedule MSS-R1 shows an Index of Return below 1.0 (revenue is less than the cost of providing service) for all six CCOS studies.

Q. What are the CCOS study results for the total SGS class?

A. Schedule MSS-R1 shows an Index of Return above 1.0 (revenue exceeds cost of providing service) for all six CCOS studies.

Q. What are the CCOS study results for the total MGS class?

A. Schedule MSS-R1 shows an Index of Return above 1.0 (revenue exceeds cost of providing service) for all six CCOS studies.

Q. What are the CCOS study results for the total LGS class?

A. Schedule MSS-R1 shows an Index of Return above 1.0 (revenue exceeds cost of providing service) for all six CCOS studies.

Q. What are the CCOS study results for the total LPS class?

A. Schedule MSS-R1 shows an Index of Return below 1.0 for four studies, at 1.0 for one study and 1.01 for one study.

Q. What are the CCOS study results for the Lighting class?

A. Schedule MSS-R1 shows an Index of Return above 1.0 for five studies and at 0.99 for one study. Two studies show an Index of Return of 6.12. These two CCOS studies are based on a 4 CP method. These are the studies where "free ridership" is involved. This is part of the reason Staff uses NCP information rather than CP information in its BIP CCOS study.

Rate Design Recommendations

Q. Have you prepared a summary of the class cost-of-service study results parties presented in their direct cases?

A. Yes. Because a CCOS study is not precise, it should be used only as a guide for designing rates. In addition, bill impacts need to be considered. Based on its CCOS study results and judgment, Staff recommended revenue adjustments to all KCPL rate schedules in its direct filing. However, different parties defined their customer classes differently for purposes of their CCOS studies. For example, Staff principally used each different rate schedule as a separate customer class. In contrast, the Industrials used groups of rate schedules as customer classes for their CCOS studies. This means that Staff's study is more granular than the Industrials studies and direct comparisons are difficult. Therefore, I summarized each of the filed CCOS studies and present them in a table based on a relative Index of Return. An Index of Return above 1.0 indicates the customer class is exceeding its revenue responsibility—cost to provide service to that class; therefore, to equalize revenue responsibility and cost-of-service, rate revenues should be reduced, i.e., the rates for that class are too high. An Index of Return below 1.0 indicates the class is not meeting its revenue responsibility—KCPL's cost to provide service to that class; therefore, to match revenue responsibility and cost-of-service, rates for that class are too low. Table 1 shows Indices of Return for classes based on the six CCOS studies filed in this case. Where a study is not as disaggregated as Staff's study, the Index of Return for the aggregate of the customer classes Staff used that corresponds to the customer class in the less granular study is also presented. For example, Staff is shown with an Index of Return of 0.77 for the Residential rate group, although Staff's residential customer classes are the more granular regular residential, all-electric residential, separately-metered residential and time-of-day residential classes.

TABLE 1

Summary Results of Class Cost of Service Results INDEX OF RETURN						
Customer Class	**KCPL**	**Staff**	**DOE**	**Industrials A&E - 4NCP**	**Industrials A&E - 2NCP**	**Industrials 4CP**
RESIDENTIAL (RES)	0.98	0.77	0.66	0.70	0.67	0.66
Regular	1.03	0.80				
All Electric	0.79	0.79				
Separately Metered	0.82	0.36				
Time of Day	0.93	0.53				
SMALL GENERAL SERVICE (SGS)	1.97	2.10	2.10	1.77	1.87	2.10
Primary & Secondary	2.02	2.18				
Other	1.40	1.87				
All Electric	1.68	1.44				
Separately Metered	1.02	0.64				
MEDIUM GENERAL SERVICE (MGS)	1.13	1.17	1.21	1.14	1.17	1.21
Primary	1.83	2.46				
Secondary	1.15	1.21				
All Electric	0.98	0.91				
Separately Metered	0.84	0.56				
LARGE GENERAL SERVICE (LGS)	1.02	1.19	1.30	1.34	1.38	1.30
Primary	1.35	1.98				
Secondary	1.13	1.41				
All Electric	0.84	0.83				
Separately Metered	0.90	0.67				
LARGE POWER SERVICE (LPS)	0.67	0.81	0.97	1.00	1.01	0.97
Primary	0.67	0.88				
Secondary	0.67	0.72				
Substation	0.61	0.57				
Transmission	0.76	1.27				
LIGHTING	1.28	1.34	6.12	0.99	1.11	6.12

Q. Are the customer classes the same in each of the CCOS studies?

A. No. With a few exceptions, each customer class in the KCPL and Staff CCOS studies corresponds to a KCPL rate schedule. The DOE and the Industrials used the rate groups—Residential (RES), Small General Service (SGS), Medium General Service (MGS), Large General Service (LGS), Large Power Service (LPS) and Lighting to define their customer classes. KCPL has twenty-one rate schedules with the RES group being based on four rate schedules, the SGS group being based on four rate schedules, the MGS group being based on four rate schedules, the LGS group being based on four rate schedules and the LPS group being based on four rate schedules. The Lighting group is made up of four rate schedules.

Q. Why didn't Staff aggregate rate schedules into larger, simpler rate groups for defining the customer classes it used in its CCOS study?

A. Generally, if customer characteristics are distinct enough to warrant a separate rate schedule they should also be different enough to warrant a separate customer class, unless the number of customers on the rate schedules is insufficient to warrant distinct treatment for CCOS purposes. Based on Staff's more granular customers classes, had Staff based more of its customer classes on rate groups, by doing so some of those customers would have had their revenue responsibilities moved in the wrong direction when rates for the rates for the group as a whole were changed to better match the rate group's revenue responsibility to KCPL's cost to serve the entire group.

Q. Do you have any examples?

A. Yes. For example, when aggregated, customers in the MGS rate group have a greater revenue responsibility than KCPL's cost to serve the MGS rate group (it appears it

might be appropriate to lower their rates—index of return is 1.17), but when disaggregated, the All-Electric MGS (index of return is 0.91) and the Separately metered MGS customers (index of return is 0.56) have less of a revenue responsibility than KCPL's cost to serve each of them, i.e., (it may be that their rates should be increased). Adjusting the aggregated MGS rate schedules together - applying a revenue neutral increase/decrease to all the customers in the MGS rate group without considering them separately - would further distort the mismatch between the revenue responsibilities of the customers taking service on the primary and secondary rate schedules and those taking service on the All Electric and Separately Metered rate schedules from KCPL's costs to serve them.

Q. Does Staff agree with KCPL's rate design?

A. No. KCPL's rate design to spread its revenue requirement increase to all customer classes and all rate components on an equal percentage basis. It is Staff's position that, instead, adjustments should be made to move customer class revenue responsibilities closer to KCPL's cost to serve each class. Therefore, an across the board equal percentage increase to each customer class is inappropriate.

Q. Does Staff recommend interclass shifts in class revenue responsibilities at this time?

A. Yes. Staff recommends that it is time to start moving the revenue responsibilities of customer classes (generally correlating to rate schedules) closer to KCPL's cost to serve them.

Q. Does Staff agree with the DOE's rate design?

A. No. DOE's rate design is that the Commission approve an across-the-board revenue spread of any increase granted to KCPL. This is the same as KCPL's rate design and, for the same reasons, should be rejected.

Q. Does Staff agree with MGE's rate design?

A. No. MGE's rate design is that the Commission eliminate KCPL's discounted residential electric rates. Specifically, Rate B – Residential General Use and Space Heat – One Meter; Rate C – Residential General Use and Space Heat – 2 Meters; and Rate D (applicable to electric space and water heating). At this time, Staff does not support MGE's recommendation to eliminate these residential rate schedules. Staff does not oppose all-electric residential rates; instead Staff recommends that the customers on such rate schedule(s) be moved closer toward KCPL's cost to serve them. (Noack Direct Testimony, p. 2)

Q. Why does Staff oppose elimination of these residential rate schedules?

A. Staff recommends that the Commission recognize the potential rate shock of outright elimination of these schedules, which is mitigated by gradually bringing the rates to parity with the Residential General Use rate.

Q. Does Staff agree with the Office of Public Counsel's (OPC) rate design?

A. No. OPC's rate design is that

> [T]he maximum revenue neutral shift [Meisenheimer] would recommend would increase the Large Power class by one half of the "revenue neutral shifts" indicated by the class cost of service study or $4,364,811 [$407,165,225*1/2*(6.396%-4.252%)]. The Small General Service and Medium General Service classes should receive a revenue neutral reduction with Small General Service receiving a greater share of the reduction since Small general service is substantially farther above cost of service. I'd recommend that Small General service receive approximately 88% ($3,848,970) of the $4,364,811 revenue neutral reduction and Medium General service receiving the remaining 12% ($515,841) of the reduction. (Meisenheimer, Direct Testimony, P. 4, 5).

Staff agrees that certain rate schedules in the SGS, MGS and LPS rate groups need to be adjusted. However, based on Staff's CCOS study, some customers on rate schedules within these rate groups (SGS, MGS, or LPS) might have their revenue responsibilities moved in the opposite direction from KCPL's cost to serve them, Staff does not support OPC's proposal.

Q. Does Staff agree with the Industrial's rate design?

A. No. The Industrial's rate design is to

> [M]ov[e] 25% of the way toward cost of service, which limits the Residential class revenue-neutral increase to 2.7% (as compared to the 10.6% increase required to move all the way to cost of service) is relatively moderate, and must be considered in light of the fact that other classes are being asked to continue to provide part of the revenue responsibility that rightly should be shouldered by the Residential class.
> (Brubaker, Direct Testimony, p. 29).

Like OPC's proposal, because the revenue responsibilities of customers on some rate schedules may be moved in the opposite direction from KCPL's cost to serve them, Staff does not support Industrials' rate design recommendation.

Industrials' Proposed Rate Design Intraclass Revenue Shifts

Q What are the Industrials' rate design proposals for intraclass revenue shifts?

A. The Industrials' proposal is to

> maintain the energy charges for the high load factor (over 360 hours use per month, or over a 50% load factor) block at their current levels, increase the middle blocks (hours use from 181 to 360) by three quarters of the average percentage increase, and to collect the balance of the revenue requirement for the tariff by applying a uniform percentage increase to the remaining charges in the tariff. This includes the customer charge, the reactive demand charge, the facilities charges, the demand charges and the initial block energy charges." (Brubaker, Direct Testimony, p. 34)

The Industrials do not state a rationale for this type of rate. A possible rationale is an assumption that high load factor customers are less expensive to serve than low load factor customers.

Q. Do you agree that high load factor customers are less expensive to serve than low load factor customers?

A. Not in all instances. The relationship of load factor to cost-to-serve depends on the generation resources of the utility. If a customer has a 100 MW load and a 100% load factor (i.e., it uses 100 MW every hour), then a base load plant is the least-cost way to meet that customer's load. On the other hand, if the customer has a 100 MW load, but the load only exists for a few hours a year (i.e., it is a low load factor customer), then the least-cost method to meet that customer's load would be with a peaking unit that has a low cost to build, but is more expensive to run than the base load unit. This low load factor customer may actually be cheaper to serve than the high load factor customer. If an electric utility's generation was only built to meet peak loads, it would never make any economic sense to spend billions of dollars to build a base generation facility. Since generation facilities are built to satisfy the demand for electricity throughout the year at the lowest cost, it is reasonable to allocate part of the Production-Capacity allocator on loads throughout the year. Generation facilities are built to meet the entire load of the electric utility at every point in time.

Q. Has Staff analyzed the Industrials' rate design?

A. Yes. Staff analyzed each of the eighty-six customers currently served on the LPS rate schedules. It appears that thirty-four customers (40%) would benefit from the Industrials' rate design while fifty-two customers (60%) would pay higher electricity rates. Percentage-wise, the LPS customer impacts vary from a 4.8% to 16.8% increase, based on KCPL's proposed overall company rate increase of 13.7%.

Staff is concerned that the Industrials' rate design is too drastic a change in rates, and customer bills, since 60% of the customers would receive a higher percent increase while 40% of the customers would get less than the average increase.

Q. Did the Industrials present evidence concerning the effect of this proposal on KCPL's ability to collect its authorized revenue requirement?

A. No. The Industrials did not provide any information regarding customers who might elect to switch (rate switchers) from a SGS or MGS to a LGS rate schedule, or vice-versa. Unless the revenue impacts from rate switching are accounted for, one cannot know whether KCPL would realize all of the revenue requirement the Commission authorizes for it.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

Missouri Public Service Commission
Case No. ER-2010-0355

Summary Results of Class Cost of Service Results INDEX OF RETURN						
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Time of Day	0.93	0.53				
SMALL GENERAL SERVICE (SGS)	1.97	2.10	2.10	1.77	1.87	2.10
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Other	1.40	1.87				
All Electric	1.68	1.44				
Separately Metered	1.02	0.64				
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Primary	1.35	1.98				
Secondary	1.13	1.41				
All Electric	0.84	0.83				
Separately Metered	0.90	0.67				
LARGE POWER SERVICE (LPS)	0.67	0.81	0.97	1.00	1.01	0.97
Primary	0.67	0.88				
Secondary	0.67	0.72				
Substation	0.61	0.57				
Transmission	0.76	1.27				
LIGHTING	1.28	1.34	6.12	0.99	1.11	6.12