EXHIBIT NO.	
WITNESS:	**DENNIS W. GOINS**
TYPE OF EXHIBIT	**REBUTTAL TESTIMONY**
ISSUES:	**COST OF SERVICE, REVENUE SPREAD**
SPONSORING PARTY:	**U.S. DEPT. OF ENERGY**
CASE NO.	**ER-2010-0355**

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2010-0355

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 THE REGULATORY PLAN

REBUTTAL TESTIMONY OF DR. DENNIS W. GOINS ON BEHALF OF THE U.S. DEPARTMENT OF ENERGY

December 10, 2010

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MISSOURI PUBLIC SERVICE COMMISSION

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INTRODUCTION

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

A. My name is Dennis W. Goins. I operate Potomac Management Group, an economics and management consulting firm. My business address is 5801 Westchester Street, Alexandria, Virginia 22310.

Q. DID YOU FILE DIRECT TESTIMONY IN THIS CASE?

A. Yes. I filed direct testimony on November 24, 2010, on behalf of the U.S. Department of Energy (DOE) representing the Federal Executive Agencies (FEA), including the National Nuclear Security Administration (NNSA) facility in Kansas City that is served by Kansas City Power & Light Company (KCPL).

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond to the direct testimony of Staff witness Michael S. Scheperle and Office of Public Counsel (OPC)

witness Barbara A. Meisenheimer regarding cost-of-service and revenue spread issues. Witness Scheperle sponsors the Staff's class cost-of-service study (COSS) and *Rate Design and Cost-of-Service Report* (COS Report). He also presents Staff's proposed revenue spread. Witness Meisenheimer did not conduct a class COSS, but instead accepted results from the class COSS sponsored by KCPL witness Paul M. Normand "as a guide in setting rates." In particular, witness Meisenheimer used results from KCPL's class cost study to develop OPC's proposed revenue spread that produces significant interclass revenue shifts.

Q. ON THE BASIS OF YOUR REVIEW OF THE DIRECT TESTIMONY OF WITNESSES SCHEPERLE AND MEISENHEIMER, HAVE YOU CHANGED ANY OF THE CONCLUSIONS AND RECOMMENDATIONS DELINEATED IN YOUR DIRECT TESTIMONY?

A. No. I continue to recommend that the Commission:

1. Reject KCPL's Base-Intermediate-Peak (BIP) Method for allocating fixed production costs to rate classes. Instead, KCPL should be required to use the four coincident peak method (4CP Method).
2. Reject KCPL's proposed allocation of off-system sales margins. Instead, the energy component of such margins should be allocated using loss-adjusted kWh (energy) for each class.
3. Approve an across-the-board revenue spread of any rate increase granted to KCPL.

COST OF SERVICE

Q. WHAT METHOD DID STAFF RECOMMEND TO ALLOCATE DEMAND-RELATED PRODUCTION COSTS TO RATE CLASSES?

A. Staff recommended the BIP Method, and used this method in its class COSS.

Q. ARE THE BIP CLASS COST STUDIES THAT STAFF AND KCPL CONDUCTED IDENTICAL?

A. No. The cost studies reflect different revenue requirements for the Missouri retail jurisdiction. In addition, although Staff and KCPL used the same BIP Method, Staff developed certain BIP allocation factors differently than KCPL. For example, the energy-based factor that Staff used to allocate fixed baseload plant costs in its class COSS reflects total test-year, loss-adjusted kWh by rate class. In contrast, KCPL used an energy-based factor that reflects annualized kWh by class based on a minimum-use month. While Staff used different approaches to develop certain BIP allocation factors, Staff's different approaches do not cure the fundament flaw in the BIP Method. Specifically, the BIP Method inappropriately allocates all baseload plant costs and the vast majority of KCPL's total fixed production costs on the basis of customer energy use with almost no regard for the demands that customers impose on KCPL's system. This costing is counter to fundamental utility planning practices that emphasize the need for sufficient production capacity to meet peak demands and provide adequate reserve capacity for reliability.

Q. IN ITS CLASS COST STUDY, DID STAFF ADDRESS THIS MAJOR FLAW IN THE BIP METHOD?

A. No. The BIP Method used in both the Staff and KCPL class cost studies allocates all baseload capacity costs on the basis of energy use. This

approach fails to recognize any meaningful capacity value of baseload capacity.[1]

Q. IS THE ASSIGNMENT OF KCPL'S GENERATING PLANTS TO BASE, INTERMEDIATE, AND PEAKING CATEGORIES CONSISTENT IN THE KCPL AND STAFF BIP CLASS COST STUDIES?

A. No. There are large and significant differences in how Staff and KCPL assigned production capacity to BIP categories. For example, as shown in Schedule DWG-R-1 and summarized in Table 1 below, Staff categorized approximately 2,800 MW of KCPL's generating plants as Base capacity—about 700 MW (34 percent) more than KCPL assigned to the Base category.[2] Similarly, Staff assigned 266 MW (28 percent) more capacity to the Peak category and 975 MW (66 percent) less capacity to the Intermediate category than did KCPL.

Table 1. BIP Capacity Categories

	Capacity (MW)		Difference	
Category	**KCPL**	**Staff**	**MW**	**Percent**
Peak	947	1,213	266	28%
Intermediate	1,485	510	(975)	-66%
Base	2,082	2,791	709	34%
Total	4,514	4,514	0	0%

Source: Schedule DWG-R-1.

These inconsistencies point out another serious flaw in the BIP Method—the arbitrary assignment of generating plants to the BIP categories. Even KCPL and Staff cannot agree on which plants should be

[1] *See* Staff's COS Report at 19:17-18. My review of Staff's class COSS workpapers indicates that Staff's Production-Energy allocation factor is based on test-year, loss-adjusted kWh by class. I should note that Staff did correct KCPL's improper allocation of off-system sales margins by allocating these margins on the basis of energy—which follows Commission precedent.

assigned to a specific category. Staff apparently believes that fixed costs associated with an additional 700 MW of KCPL's baseload generating capacity should be allocated to classes on the basis of energy. In contrast, KCPL allocates fixed costs associated with this capacity on the basis of an adjusted 12CP allocator. Both Staff and KCPL cannot be right about how these particular capacity costs should be allocated. And nobody can prove that either party is correct, since the assignment of plants to BIP categories depends not on readily observable load measures, but rather on arbitrary and untested analyses of plant operating characteristics and costs. Without an objective standard for assigning plants to capacity categories, the BIP Method is subject to manipulation.

Q. IN YOUR OPINION, IS STAFF'S CLASSIFICATION OF PRODUCTION PLANT OUTSIDE THE MAINSTREAM OF EMBEDDED COST ANALYSIS?

A. Yes. The three primary steps in a class COSS are functionalization, classification, and allocation. In embedded cost studies, fixed production plant costs are typically classified as demand-related costs, and then allocated to classes using factors that reflect only customer demands or a combination of demand and energy measures. In its BIP class COSS, Staff classified Peak and Intermediate production plant as demand-related, and allocated these costs to rate classes on the basis of adjusted 12CP (Intermediate) and 4CP (Peak) demands. This classification of production plant costs is standard in embedded cost-of-service studies.

In contrast, Staff classified 100-percent of the fixed costs of baseload capacity assigned to the Base category as ***energy-related*** costs, and allocated these fixed costs on the basis of energy—not demand. This 100-percent energy cost classification is not standard, and is outside the

[2] The capacity values shown in Table 1 and Schedule DWG-R-1 reflect total KCPL capacity—not just capacity assigned to the Missouri retail jurisdiction.

mainstream of embedded cost analysis. Energy-related costs vary with energy (kWh) production and consumption. The fixed costs of baseload units do not vary with plant output. As a result, costs associated with these plants should be classified as demand-related costs. In my opinion, all of the demand-related costs should then be allocated on the basis of class demands. (I prefer the use of coincident peak demands.) Even cost analysts that believe some fixed production costs should be classified as energy-related (for example, advocates of peak and average allocation methods) at least recognize that production plant has some capacity value—thereby justifying classifying at least some part of fixed baseload plant costs as demand-related. But Staff's BIP Method rests on the implicit assumptions that baseload capacity has no capacity value and is built solely to provide low-cost energy. As a result, Staff classified all fixed production costs assigned to the Base category as energy-related costs.[3]

Q. UNDER STAFF'S BIP CLASS COSS, WHAT PERCENTAGE OF KCPL'S FIXED PRODUCTION COSTS IS ALLOCATED ON THE BASIS OF ENERGY?

A. As I noted, Staff classified 100-percent of fixed baseload plant costs as energy-related costs. Moreover, in reviewing Staff COSS workpapers, I found that Staff allocated almost 87 percent of KCPL's total fixed production plant costs (gross) on the basis of energy in its BIP class COSS.[4] This percentage is extraordinarily high, and essentially means that Staff is allocating almost all of KCPL's fixed production costs on the basis of energy. In my career, I have participated in rate cases in approximately 30 regulatory jurisdictions, and reviewed and analyzed dozens of cost

[3] *See* Staff's COS Report at 12:1-2.

[4] In KCPL's BIP class COSS, around 72 percent of KCPL's total production plant costs (gross) were allocated on an energy basis (allocation factor DEM1A). Since Staff assigned more capacity

studies presented in these cases. I have never encountered another cost study with an energy-based fixed production cost allocation percentage this high.

Q. IS STAFF'S COST CLASSIFICATION A PROBLEM?

A. Yes. Staff not only improperly classified baseload plant costs as 100-percent energy-related costs, it compounded its error by adding more than 700 MW of capacity to the Base category compared to KCPL. (See Table 1.) Because Base capacity costs are allocated using an energy-based factor in Staff's BIP class COSS versus a demand-based allocation factor for Intermediate and Peaking capacity costs, Staff's classification of baseload capacity unjustly shifts cost responsibility to higher load factor rate classes (in particular, the Large Power Service (LPS) class). In other words, Staff's baseload classification error and arbitrary assignment of generating units to the Base category produce results in its BIP class COSS that indicate the LPS class is currently paying rates below KCPL's cost of service. As I discuss in more detail later, Staff relied on these COSS results in recommending a disproportionate rate increase for LPS customers.

Q. IF THE COMMISSION DECIDES THAT KCPL'S PRODUCTION COSTS SHOULD BE ALLOCATED USING A METHOD THAT REFLECTS CLASS ENERGY USE AS WELL AS PEAK DEMANDS, WHAT METHOD WOULD YOU RECOMMEND IN THIS CASE?

A. I would recommend using the average and excess, four noncoincident peak allocation methodology (AED-4NCP Method) proposed in this case by

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to the Base category than KCPL, the percentage of production plant allocated on the basis of energy in Staff's class COSS was much greater.

witness Maurice Brubaker.[5] Unlike the BIP Method, the AED-4NCP Method:

- Requires no arbitrary classification of production capacity.
- Recognizes the capacity value of baseload generating units.
- Relies on readily observable load data to develop allocation factors.

While I prefer the 4CP Method that I used in the DOE class COSS described in my direct testimony, the next best alternative presented in this case is the AED-4NCP method proposed by witness Brubaker.

Q. HAS THE COMMISSION PREVIOUSLY APPROVED THE AED-4NCP ALLOCATION METHOD?

A. Yes. In a recent AmerenUE rate proceeding (Case No. ER-2010-0036), the Commission approved this method to allocate AmerenUE's demand-related production costs.[6]

REVENUE SPREAD

Q. DID KCPL PROPOSE ANY MAJOR INTERCLASS REVENUE SHIFTS ON THE BASIS OF RESULTS FROM ITS CLASS COSS?

A. No. KCPL proposed spreading its proposed $92.1 million (13.8 percent) rate increase on a uniform, across-the-board percentage basis to each class. As I noted in my direct testimony, this proposal is reasonable given the unreliability of results from KCPL's class COSS and the need to temper class rate increases during tough economic times.

[5] *See* the direct testimony of Maurice Brubaker at 20:3-21:16.
[6] *See* the Commission's *Report and Order* in Case No. ER-2010-0036 at 86-87.

Q. DID WITNESSES SCHEPERLE AND MEISENHEIMER ALSO PROPOSE AN ACROSS-THE-BOARD REVENUE SPREAD?

A. No. Both Staff and OPC proposed shifting revenues to the higher load factor LPS class. More specifically, witness Scheperle proposed:

- Allocating the first $13 million of any approved revenue increase on an across-the-board basis to each class whose current rates are below cost of service.
- Allocating any approved increase above $13 million on an equal percentage across-the-board basis to all rate classes.
- Allocating any approved rate decrease on an across-the-board basis to each class whose current rates are above cost of service.[7]

Witness Meisenheimer did not identify how any approved revenue increase should be spread across rate classes. Instead, witness Meisenheimer simply proposed *revenue neutral shifts*[8] under current rates that would:

- Shift approximately $4.4 million in additional revenue to the LPS class.
- Reduce revenues from the Small General Service class by about $3.8 million.
- Reduce revenues from the Medium General Service class by about $0.5 million.[9]

Q. DO YOU AGREE WITH THE REVENUE SPREADS PROPOSED BY WITNESSES SCHEPERLE AND MEISENHEIMER?

A. No. Their proposed revenue spreads (or revenue neutral shifts) are based on results from flawed BIP class cost studies. As I showed in my direct

[7] *See* the direct testimony of Staff witness Michael S. Scheperle at 2:16-26.
[8] Witness Meisenheimer defines a *revenue neutral shift* (direct testimony at 4:17-19) as a change in class revenues under current rates holding total KCPL revenues constant.
[9] *Ibid*. at 4:13-5:23.

testimony, correcting key flaws in KCPL's class COSS produces results that simply do not support significantly increasing the revenue requirement of the LPS class relative to other classes. For example, the DOE 4CP cost study presented in my direct testimony showed that only a system average increase is necessary for the LPS class, but a well-above average increase is necessary to move the Residential class closer to cost of service. Witnesses Scheperle and Meisenheimer relied on a fatally flawed cost-of-service methodology to support their revenue spreads. As a result, their revenue spreads are also fatally flawed and should be rejected. The Commission should approve an equal percentage across-the-board revenue spread.

Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes.

AFFIDAVIT

Commonwealth of Virginia)
County of Fairfax) SS

Before me this day appeared DENNIS W. GOINS of Potomac Management Group, who stated under oath that the foregoing testimony was prepared by him or under his direct supervision and control; that he has knowledge of the matters set forth in said testimony; and that such matters are true and correct to the best of his knowledge, information, and belief.

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

Dennis W. Goins

Notary Public

REYNA MARIBEL VANEGAS
Notary Public
Commonwealth of Virginia
320413
My Commission Expires Jan 31, 2014

My Commission Expires: _____

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SCHEDULE TO THE REBUTTAL TESTIMONY OF DR. DENNIS W. GOINS ON BEHALF OF THE U.S. DEPARTMENT OF ENERGY

December 10, 2010

SCHEDULE DWG-R-1

PRODUCTION CAPACITY BY BIP CATEGORY

Production Capacity by BIP Category

Unit	MW	KCPL	STAFF
Wolf Creek	545	Base	Base
Iatan 1	494	Base	Base
Iatan 2	465	Base	Base
Hawthorn 5	563	Base	Base
Spearville 1	15	Base	Base
La Cygne 1	368	Intermediate	Base
La Cygne 2	341	Intermediate	Base
Montrose 1	170	Intermediate	Intermediate
Montrose 2	164	Intermediate	Intermediate
Montrose 3	176	Intermediate	Intermediate
Hawthorn 6 + 9	266	Intermediate	Peak
Hawthorn 7	75	Peak	Peak
Hawthorn 8	76	Peak	Peak
Northeast 11	412	Peak	Peak
Northeast 12			
Northeast 13			
Northeast 14			
Northeast 15			
Northeast 16			
Northeast 17			
Northeast 18			
West Gardener 1	308	Peak	Peak
West Gardener 2			
West Gardener 3			
West Gardener 4			
Osawatomie	76	Peak	Peak

Source: Paul Normand direct at 9:Table 2; Staff COSS workpapers; Staff capacity categories adjusted to eliminate 48 MW not included in Normand Table 2.