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Class Cost of Service/

Rate Design

Kind/Direct

Public Counsel

ER-2011-0028

## **DIRECT TESTIMONY**

**OF**

**RYAN KIND**

Submitted on Behalf of  
the Office of the Public Counsel

**UNION ELECTRIC COMPANY D/B/A AMERENUE**

**Case No. ER-2011-0028**

February 10, 2011





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1 guidance for determining how rates (e.g., customer charges) should be designed to collect  
2 revenues from customers within a class, depending on customer usage levels and  
3 patterns.

4 **Q. PLEASE OUTLINE THE BASIC ELEMENTS OF THE CLASS COS STUDY THAT YOU**  
5 **PERFORMED FOR THIS CASE.**

6 A. The three primary steps that must be taken in order to perform a class COS Study are the  
7 functionalization, classification, and allocation of costs.

8 Functionalization of costs involves categorizing accounts by the type of function with  
9 which an account is associated. Accounts are categorized as being related to Production,  
10 Transmission, Distribution, Customer Accounts, Administrative and General, etc.,  
11 depending on the electric utility functions of which they are a part.

12 Once costs have been functionalized, they are classified as being customer (related to the  
13 number of customers), demand (related to the portion of peak usage), commodity (related  
14 to annual energy consumption), or "other" costs, depending on the function with which  
15 they are associated. For example, customer records and collection expense, meter plant,  
16 and meter reading expense are considered customer-related, since a company's  
17 expenditures in these areas are related to the number of customers that it serves. These  
18 expenses, although dependent to some extent on a customer's size, will be incurred for  
19 each customer whether or not the customer uses any electricity so it would not be  
20 reasonable to classify them as being commodity-related.

21 Finally, after costs have been classified, the analyst chooses allocation factors that will  
22 allocate a reasonable share of jurisdictional costs to each customer class. Allocation  
23 factors are based on ratios that represent the proportion of total units (total number of  
24 customers, total annual energy consumption, etc.) attributable to a certain customer class.

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1            These ratios are then used to calculate the proportions of various cost categories for  
2            which a class is responsible.

3            **Q.    WHICH CUSTOMER CLASSES HAVE YOU USED IN YOUR CLASS COS STUDY?**

4            A.    I have used the Residential (Res), Small General Service (SGS), Large General Service  
5            (LGS), Small Primary Service (SPS), Large Primary Service (LPS) and Large  
6            Transmission Service (LTS) classes. The LGS and SPS classes were combined into one  
7            class for this CCOS study but that combination should not be interpreted as an OPC  
8            endorsement of combining these two separate rate classes.

9            **Q.    ON WHAT DATA IS YOUR CLASS COS STUDY BASED?**

10           A.    It is based on information from Union Electric Company (UE or Company) and the  
11           Commission Staff (Staff). I used financial information from Staff for the test year in this  
12           case. My use of this information should not be seen as an endorsement of Staff's or UE's  
13           methods for calculating accounting costs or billing determinants.

14           **Q.    NEXT, PLEASE DISCUSS THE METHODS THAT YOU USED TO ALLOCATE  
15           FUNCTIONALIZED COSTS.**

16           A.    Public Counsel witness Barbara Meisenheimer calculated the Production allocator used in  
17           the class COS Study. Ms. Meisenheimer's Direct Testimony in this case describes how  
18           her allocator was developed.

19           **Q.    DID YOU FOLLOW THE COMMONLY ACCEPTED PRACTICE IN CCOS STUDIES OF  
20           HAVING EXPENSES FOLLOW PLANT?**

21           A.    Yes.

1 **Q. WHAT DO YOU MEAN BY "EXPENSES FOLLOW PLANT"?**

2 A. I simply mean that operation and maintenance costs associated with a particular type of  
3 plant were allocated in the same manner as the corresponding plant.

4 **Q. HOW DID YOU ALLOCATE GENERAL PLANT?**

5 A. I developed a composite allocator based on previously allocated gross non-general plant  
6 and applied this to General Plant.

7 **Q. HOW DID YOU ALLOCATE POWER PRODUCTION EXPENSES?**

8 A. I started the allocation process by using the breakdown of fuel and other fuel-related costs  
9 that was part of the accounting information provided by Staff. I applied the Company's  
10 calculation of kWhs at generation by class to allocate the energy-related production and  
11 purchased power expenses.

12 I used the Average and 4 Coincident Peak (Average and 4 CP) production plant allocator  
13 to allocate the other production expenses. These "other" expenses consist of production  
14 expenses that for the most part do not vary directly with the amount of power being  
15 generated and include the fixed (capacity) charge portion of Purchased Power (Account  
16 555).

17 **Q. HOW DID YOU USE THE "EXPENSES FOLLOW PLANT" PRINCIPLE TO ALLOCATE  
18 DISTRIBUTION EXPENSES?**

19 A. I applied the same allocators to distribution expenses that I had applied to the plant  
20 associated with those expenses. For expenses that are not associated with any particular

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1 category of distribution plant, such as Supervision and Engineering (Account 580), I used  
2 an allocator based on allocated gross distribution plant.

3 **Q. HOW DID YOU ALLOCATE CUSTOMER ACCOUNTS?**

4 A. Accounts 902, 903, and 904 were allocated using allocators that UE developed for its  
5 CCOS study in this case. I allocated Accounts 901 and 905 based on the costs that were  
6 allocated to accounts 902, 903, and 904.

7 **Q. HOW DID YOU ALLOCATE CUSTOMER SERVICE AND SALES EXPENSES?**

8 A. Customer service expenses were allocated based on the percentage of Customer Accounts  
9 costs that were allocated to each customer class. I used my class COS allocator to  
10 allocate Sales Expenses. A class COS allocator allocates selected costs based on the sum  
11 of all other costs (except for those selected costs allocated based on class COS) that have  
12 been allocated to each customer class.

13 **Q. HOW DID YOU ALLOCATE ADMINISTRATIVE AND GENERAL (A & G) EXPENSES?**

14 A. I divided these expenses into three categories. I allocated Property Insurance expense  
15 (Account 924) on the basis of net plant since this expense is linked to the amount of net  
16 plant already allocated to each customer class. Injuries and Damages and Employee  
17 Pensions and Benefits (Accounts 925 and 926) are both payroll-related expenses so I  
18 allocated them on the basis of the amount of payroll expense that I had previously  
19 allocated to each class. I believe all of the remaining A & G accounts represent  
20 expenditures that support the company's overall operation, so I have allocated them based  
21 on each class's share of total cost of service.

1       **Q.       HOW DID YOU ALLOCATE PROPERTY AND PAYROLL TAXES?**

2       A.       I allocated property taxes on the basis of allocated total net plant and payroll taxes on the  
3       basis of allocated payroll expenses.

4       **Q.       HOW DID YOU ALLOCATE STATE AND FEDERAL INCOME TAXES?**

5       A.       These taxes were allocated on the basis of rate base since a utility company's income  
6       taxes will be a function of the size of its rate base, and thus each class should contribute  
7       revenues for income taxes in proportion to the amount of rate base that is necessary to  
8       serve it.

9       **Q.       PLEASE DESCRIBE THE RESULTS OF PUBLIC COUNSEL'S CLASS COS STUDIES.**

10      A.       The results of Public Counsel's class COS study are summarized in Table 1 in  
11      Attachment A. Table 1 shows the results of OPC's CCOS study using the Average and 4  
12      CP production allocator. This table shows the revenue neutral class revenue shifts (on  
13      both a dollar basis and a percentage of class revenues basis) that OPC's studies indicate  
14      would be necessary to equalize class rates of return. The study results show that  
15      residential customers are currently providing rate revenues that are roughly in line with  
16      the amount of total jurisdictional costs that were allocated to the residential class in  
17      OPC's CCOS study.

18      The CCOS results in Attachment A indicate that the amount of rate revenues generated  
19      by the current tariffs for the SGS and LTS classes are substantially different from the  
20      amount of costs being incurred by UE to provide service to these classes. In the case of  
21      the SGS class, the current rate revenues for this class are substantially higher than the  
22      costs of providing service to this class. The opposite situation exists with the LTS class  
23      where the current rate revenues for this class are substantially less than the costs of



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1 providing service to this class. For the LGS/SGS class and the LPS class, there is also a  
2 discrepancy between the current rate revenues and the level of allocated costs for these  
3 classes, but the discrepancy, while greater than the discrepancy that exists for the  
4 Residential class, is substantially less than the large discrepancies already noted for the  
5 SGS and LTS classes.

6 **Q. ARE YOU MAKING ANY RATE DESIGN RECOMMENDATIONS FOR THE RESIDENTIAL**  
7 **CLASS AT THIS TIME?**

8 A. Yes. I believe that these study results show that there is no need to make a revenue  
9 neutral class revenue requirement shift in this case for the Residential class.

10 **Q. ARE YOU MAKING ANY RATE DESIGN RECOMMENDATIONS FOR THE OTHER CUSTOMER**  
11 **CLASSES AT THIS TIME?**

12 A. Yes. OPC recommends making some revenue neutral class rate revenue shifts for the  
13 remaining classes to bring the amount of rate revenues collected from these classes closer  
14 to the level of costs that were allocated to these classes in OPC's CCOS study. We  
15 recommend making revenue neutral shifts (revenue neutral from a total company  
16 perspective) that move the class revenues half-way towards the class cost of service.  
17 There should be an additional constraint placed on the extent to which class revenues are  
18 moved towards class cost of service to ensure that no class receives an overall reduction  
19 in their rate revenues (the combined effect of a class's revenue neutral rate revenue  
20 decrease and the class's share of an overall increase in the company's revenue  
21 requirement) at the same time other customer classes are having overall increases in their  
22 rate revenues.

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1       **Q.     IS IT APPROPRIATE FOR THE COMMISSION TO CONSIDER FACTORS OTHER THAN THE**  
2           **RESULTS OF CCOS STUDIES WHEN DETERMINING THE MAGNITUDE OF REVENUE**  
3           **NEUTRAL SHIFTS, IF ANY, THAT ARE APPROPRIATE IN A SPECIFIC RATE CASE?**

4       A.     Certainly. As the Commission stated in its Report and Order in UE's most recent rate  
5           case (Case No. ER-2010-0036):

6                         However, the Commission is not required to precisely set rates to match  
7                         the indicated class cost of service. Instead, the Commission has a great  
8                         deal of discretion to set just and reasonable rates, and can take into  
9                         account other factors, such as public acceptance, rate stability and  
10                        revenue stability in setting rates.

11                       Additional factors that the Commission may want to consider also include the perceived  
12                       value of service, affordability of service, rate impacts, and rate continuity.

13       **Q.     DOES THIS CONCLUDE YOUR DIRECT TESTIMONY ON CLASS COST OF SERVICE AND**  
14           **RATE DESIGN ISSUES?**

15       A.     Yes.

## Results From OPC's CCOS Study

**Table 1 - Results of OPC's CCOS Study Using the Avg. & 4 CP Production Allocator**

	<b>Res</b>	<b>SGS</b>	<b>LGS / SPS</b>	<b>LPS</b>	<b>LTS</b>	<b>System</b>
Current Rate Revenue	\$1,094,889,342	\$279,625,682	\$709,229,056	\$178,621,129	\$139,489,742	\$2,401,854,951
Revenue Shift	\$34,118,624	-\$31,385,597	-\$40,352,255	\$11,324,436	\$26,294,792	\$0
% Revenue Shift	3.12%	-11.22%	-5.69%	6.34%	18.85%	0.00%