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Witness/Type of Exhibit: Kind/Direct
Sponsoring Party: Public Counsel
Case No.: ER-2010-0036

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-2010-0036

January 6, 2010

OPC Exhibit No. 300
Date 3-26-10 Reporter PF
File No. ER-2010-0036

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	)))))	**Case No. ER-2010-0036**

AFFIDAVIT OF RYAN KIND

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Ryan Kind, of lawful age and being first duly sworn, deposes and states:

1. My name is Ryan Kind. I am a Chief Utility Economist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

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

Ryan Kind

Subscribed and sworn to me this 6th day of January 2010.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

JERENE A. BUCKMAN
My Commission Expires
August 23, 2013
Cole County
Commission #09754037

Jerene A. Buckman
Notary Public

My commission expires August 23, 2013.

DIRECT TESTIMONY

OF

RYAN KIND

UNION ELECTRIC COMPANY

CASE NO. ER-2010-0036

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

A. Ryan Kind, Chief Energy Economist, Office of the Public Counsel, P.O. Box 2230, Jefferson City, Missouri 65102.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.

A. I have a B.S.B.A. in Economics and a M.A. in Economics from the University of Missouri-Columbia (UMC). While I was a graduate student at UMC, I was employed as a Teaching Assistant with the Department of Economics, and taught classes in Introductory Economics, and Money and Banking, in which I served as a Lab Instructor for Discussion Sections.

My previous work experience includes several years of employment with the Missouri Division of Transportation as a Financial Analyst. My responsibilities at the Division of Transportation included preparing transportation rate proposals and testimony for rate cases involving various segments of the trucking industry. I have been employed as an economist at the Office of the Public Counsel (Public Counsel or OPC) since 1991.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THIS COMMISSION?

A. Yes, prior to this case I submitted written testimony in numerous gas and electric rate cases and rate design cases, as well as other miscellaneous gas, water, electric, and telephone cases.

Q. HAVE YOU PROVIDED COMMENTS OR TESTIMONY TO OTHER REGULATORY OR LEGISLATIVE BODIES ON THE SUBJECT OF ELECTRIC UTILITY REGULATION AND RESTRUCTURING?

A. Yes, I have provided comments and testimony to the Federal Energy Regulatory Commission (FERC), the Missouri House of Representatives Utility Regulation Committee, the Missouri Senate's Commerce & Environment Committee and the Missouri Legislature's Joint Interim Committee on Telecommunications and Energy.

Q. HAVE YOU BEEN A MEMBER OF, OR PARTICIPANT IN, ANY WORK GROUPS, COMMITTEES, OR OTHER GROUPS THAT HAVE ADDRESSED UTILITY REGULATION AND RESTRUCTURING ISSUES FOR GAS AND ELECTRIC UTILITIES?

A. Yes. I was a member of the Missouri Public Service Commission's (the Commission's) Stranded Cost Working Group and participated extensively in the Commission's Market Structure Work Group. I am currently a member of the Missouri Department of Natural Resources Weatherization Policy Advisory Committee and the National Association of State Consumer Advocates (NASUCA) Electric Committee. I have served as the small customer representative on both the North American Electric Reliability Council (NERC) Standards Authorization Committee and the NERC Operating Committee and as the public consumer group representative to the Midwest ISO's (MISO's) Advisory Committee. During the early 1990s, I served as a Staff Liaison to the Energy and Transportation Task Force of the President's Council on Sustainable Development.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of this testimony is : (1) to present the results of Public Counsel's Class Cost of Service (Class COS or CCOS) study in this case and describe the portions of Public Counsel's study for which I am responsible and (2) to make OPC's rate design recommendations.

Q. WHAT ARE THE MAIN PURPOSES OF PERFORMING A CLASS COS STUDY?

A. The primary purpose of a class COS Study is to determine the COS for each customer class by allocating costs in a reasonable manner. Class COS studies also provide guidance for determining how rates (e.g., customer charges) should be designed to collect revenues from customers within a class, depending on customer usage levels and patterns.

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

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

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

Once costs have been functionalized, they are classified as being customer (related to the number of customers), demand (related to the portion of peak usage), commodity (related to annual energy consumption), or "other" costs, depending on the function with which

they are associated. For example, customer records and collection expense, meter plant, and meter reading expense are considered customer-related, since company expenditures in these areas are related to the number of customers that it serves. These expenses, although dependent to some extent on a customer's size, will be incurred for each customer whether or not the customer uses any electricity so it would not be reasonable to classify them as being commodity-related.

Finally, after costs have been classified, the analyst chooses allocation factors that will allocate a reasonable share of jurisdictional costs to each customer class. Allocation factors are based on ratios that represent the proportion of total units (total number of customers, total annual energy consumption, etc.) attributable to a certain customer class. These ratios are then used to calculate the proportions of various cost categories for which a class is responsible.

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

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

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

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

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

A. Public Counsel witness Barbara Meisenheimer calculated the Production allocators used in the class COS Study. Ms. Meisenheimer's Direct Testimony in this case describes how her allocators were developed.

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

A. Yes.

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

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

Q. HOW DID YOU ALLOCATE GENERAL PLANT?

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

Q. HOW DID YOU ALLOCATE POWER PRODUCTION EXPENSES?

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

I used both the Time-of-Use (TOU) and Average and 4 Coincident Peak (Average and 4 CP) production plant allocators to allocate the other production expenses. These "other" expenses consist of production expenses that for the most part do not vary directly with the amount of power being generated and include the fixed (capacity) charge portion of Purchased Power (Account 555).

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

A. I applied the same allocators to distribution expenses that I had applied to the plant associated with those expenses. For expenses that are not associated with any particular category of distribution plant, such as Supervision and Engineering (Account 580), I used an allocator based on allocated gross distribution plant.

Q. HOW DID YOU ALLOCATE CUSTOMER ACCOUNTS?

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

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

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

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

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

Q. HOW DID YOU ALLOCATE PROPERTY AND PAYROLL TAXES?

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

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

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

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

A. The results of Public Counsel's class COS studies are summarized in Tables 1 and 2 in Attachment A. Table 1 shows the results of OPC's CCOS study using the TOU production allocator and Table 2 shows OPC's study results when the Average and 4 CP production allocator is used. These tables show the revenue neutral class revenue shifts

that OPC's studies indicate would be necessary to equalize class rates of return. The CCOS study results using both the TOU and the Average and 4 CP production allocator both show that residential customers are currently providing rate revenues that are in line with the amount of total jurisdictional costs that have been allocated to the residential class. I believe that these study results show that there is no need to make revenue neutral class revenue requirement shifts in this case.

Q. ARE YOU MAKING ANY RATE DESIGN RECOMMENDATIONS AT THIS TIME?

A. Yes. I recommend that any overall revenue requirement increase that results from this case should be made by making equal percentage increases to all of the class revenue requirements. Any such increases should generally be made by making equal percentage changes to all rate elements.

Q. DO YOU HAVE ANY FURTHER RATE DESIGN RECOMMENDATIONS THAT YOU WOULD LIKE TO MAKE AT THIS TIME?

A. Yes. UE still has declining block per kilowatt-hours (kWh) charges for some of its customer classes, including the residential class, during the winter billing periods. Public Counsel believes that declining block charges are no longer an appropriate rate design for customers of Missouri regulated utility providers. These types of charges give customers an inappropriate price signal by charging lower per unit prices for higher levels of usage.

Q. WHY DID MANY UTILITY COMPANIES HAVE THE PRACTICE OF CHARGING CUSTOMERS FOR SERVICE WITH DECLINING BLOCK RATES?

A. This type of rate structure is an artifact of an earlier era when energy was not perceived to be a scare resource with large environmental impacts (and costs) resulting from usage of

the fossil fuels that are relied upon to provide utility service. Competition between electric, natural gas and propane providers (especially for heating loads) was another factor that contributed to the widespread use of declining block rates. For electric utilities that built base load capacity that needed to be grown into, declining block rates were a means of encouraging additional usage in off-peak winter periods. The issue of utilizing excess baseload electric capacity to help cover fixed costs has declined as Missouri loads have grown to more fully utilize this capacity and as highly developed regional wholesale markets have provided opportunities to make sales of excess Missouri baseload capacity.

Q. WILL FUTURE CO_2 REGULATIONS MAKE IT DIFFICULT TO SUSTAIN THE PRACTICE OF PROVIDING PRICE BREAKS TO ELECTRIC UTILITY CUSTOMERS WITH HIGHER LEVELS OF USAGE IN THE WINTER?

A. Yes. When the generation output from coal plants includes the cost of CO_2 emissions, there will no longer be a source of generation (except for nuclear and certain renewables) from which higher levels of sales could be made with low cost generation output. Since nuclear plants would be dispatched before coal plants once carbon regulation is in place, there would no longer be any low cost generation to support the higher level of winter sales encouraged by declining block rates.

Q. DO THE CURRENT MISSOURI IRP REGULATIONS ENCOURAGE MISSOURI UTILITIES TO TAKE FUTURE CARBON REGULATION COSTS INTO CONSIDERATION WHEN MAKING INVESTMENT DECISIONS ABOUT SUPPLY AND DEMAND-SIDE RESOURCES?

A. Yes. Consistent with this approach, Missouri utility consumers should make investment decisions that impact the level of their future energy usage based on price signals that are generally in accordance with the direction of future utility rate design. When customers

are making decisions about future investments in HVAC systems, lighting, industrial processes, or the thermal characteristics of building structures, those decisions should be made based on rate structures that are likely to be in place for the life of those investments. Declining block rates will eventually go away in Missouri just as they have in many other states.

Q. IS OPC OPPOSED TO ANY RATE STRUCTURES THAT CHARGE DIFFERENT RATES FOR DIFFERENT LEVELS OF USAGE?

A. No. Public Counsel is supportive of rate structures (especially if they are voluntary) that differentiate charges based on cost considerations. Such rate structures include time-of-use (TOU) rates, real time pricing, usage curtailment rates (e.g. interruptible rates), and peak time rebates.

Q. CAN DECLINING BLOCK RATES DECREASE THE COST EFFECTIVENESS OF, AND LOAD REDUCTIONS FROM, ENERGY EFFICIENCY INVESTMENTS AND PROGRAMS?

A. Yes. The payback period for energy efficiency investments increases as utility rates (at the margin) decrease. Therefore, customers considering energy efficiency investments may decide not to proceed due to the lengthier payback periods on certain investments from declining block rates.

Q. BOTH THE MISSOURI LEGISLATURE AND THIS COMMISSION HAVE SHOWN AN INTEREST IN ENCOURAGING UTILITIES TO HELP CUSTOMERS INVEST IN ENERGY EFFICIENCY. DO DECLINING BLOCK RATES IMPAIR THE ABILITY TO PURSUE THIS INTEREST?

A. Yes. Utilities often offer incentives to customers for choosing higher levels of energy efficiency and those customer investments where the payback periods are impacted

adversely by declining block rates may not occur unless utilities offer higher incentives to offset the impact of declining block rates. Of course, higher utility incentives lead to higher utility costs that will eventually be paid for by customers.

Q. SHOULD RATE IMPACTS AND GRADUALISM BE CONSIDERED IN THE TIMING OF EITHER PHASING OUT OR ELIMINATING DECLINING BLOCK RATES?

A. Yes.

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

A. Yes.

Results From OPC's CCOS Study

Table 1 - Results of OPC's CCOS Study Using the TOU Production Allocator

	Res	SGS	LGS/SPS	LPS	LTS	System
Revenue Shift	9,399,049	(23,191,511)	(22,896,370)	17,333,916	19,354,915	$0
% Revenue Shift	0.98%	-9.34%	-3.54%	10.38%	13.91%	0.00%

Table 2 - Results of OPC's CCOS Study Using the Avg. & 4 CP Production Allocator

	Res	SGS	LGS/SPS	LPS	LTS	System
Revenue Shift	25,824,928	(19,825,942)	(28,001,742)	13,888,654	8,114,102	0
% Revenue Shift	2.68%	-7.99%	-4.33%	8.32%	5.83%	0.00%