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Witness: Wilbon L. Cooper
Sponsoring Party: Union Electric Company
Type of Exhibit: Direct Testimony

Case No.: ER-2012-0166

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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2012-0166

DIRECT TESTIMONY

OF

WILBON L. COOPER

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

St. Louis, Missouri February, 2012

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1	DIRECT TESTIMONY	
2	\mathbf{OF}	
3	WILBON L. COOPER	
4	CASE NO. ER-2012-0166	
5	I. INTRODUCTION	
6	Q. Please state your name and business address.	
7	A. My name is Wilbon L. Cooper. My business address is One Amere	en
8	Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.	
9	Q. By whom are you employed and in what capacity?	
10	A. I am employed by Union Electric Company d/b/a Ameren Missou	ıri
11	("Ameren Missouri" or the "Company") as the Manager of the Rates and Tarif	fs
12	Department.	
13	Q. Please describe your educational background and employment	nt
14	experience.	
15	A. I have a Bachelor of Science degree in Electrical Engineering from the	ne
16	University of Missouri-Rolla.	
17	I was employed as an Assistant Engineer in the Rate Engineering Department	of
18	Union Electric in June 1980. My work included assignments relating to the gener	al
19	analyses and administration of various aspects of Union Electric's electric, gas, and stea	m
20	rates. In October 1989, I was appointed Supervising Engineer - Rate Analysis in the	ne
21	Rate Engineering Department of Corporate Planning, which eventually became a part	of
22	Ameren Services Company. In this position, I was responsible for meeting the analytic	al
23	requirements for the Company's retail gas and electric rates and wholesale electric rate	es,

- 1 including load research and various cost of service and rate design studies, as assigned. I
- 2 was appointed to my present position of Manager of Rates and Tariffs in March 2003.
- 3 I currently have responsibility for the general policies and practices associated
- 4 with the day-to-day administration and design of Ameren Missouri's electric and gas rate
- 5 tariffs, riders and rules and regulations tariffs on file with the Missouri Public Service
- 6 Commission ("Commission") and in the participation in various proceedings before this
- 7 regulatory agency. In addition, Rates and Tariffs is responsible for conducting class cost
- 8 of service and rate design studies and the participation in other projects of a general
- 9 corporate nature, as requested by the Company's Vice President-Regulatory and
- 10 Legislative Affairs.

- I have previously submitted testimony before the regulatory commissions of
- 12 Missouri, Illinois, and Iowa.

II. PURPOSE AND SUMMARY OF TESTIMONY

- Q. What is the purpose of your direct testimony in this proceeding?
- 15 A. My direct testimony discusses: a) the revenue increase being proposed for
- the Company's electric retail rate classes; b) the development and results of a class cost
- of service study being submitted in connection with the direct testimony of Ameren
- 18 Missouri witness William M. Warwick as part of this case; and c) the design and
- development of rates for the individual class rates.

1 Q. Are you sponsoring any schedules for presentation to the Commission in this

2 proceeding?

- 3 A. Yes. I am sponsoring eight schedules. The first three, discussed
- 4 immediately below, provide a summary of the rate increase requested in this case. I
- 5 discuss the remaining schedules throughout my direct testimony.

6 Q. Please identify Schedule WLC-E1.

- A. Schedule WLC-E1 consists of thirty-two (32) tariff sheets, which reflect
- 8 the revised rate tariffs. These tariffs, taken as a whole, would provide an increase in the
- 9 Company's net Missouri electric jurisdictional normalized test year revenues of
- approximately \$375.6 million, or approximately 14.6%, over the annualized test year
- base rate¹ revenue that would be realized from the tariffs which are effective at the time
- of this filing.

13 Q. Please identify Schedule WLC-E2.

- 14 A. Schedule WLC-E2 shows the distribution of the proposed net revenue
- increase to the Company's various proposed rate service classifications resulting from the
- rates contained in the proposed tariffs in Schedule WLC-E1, excluding gross receipts
- taxes levied on customer billings by the various municipalities within the Company's
- 18 service area.

19 Q. Please identify Schedule WLC-E3.

- A. Schedule WLC-E3 illustrates the effects of the proposed rates in the tariffs
- 21 in Schedule WLC-E1 upon typical monthly bills of customers served under the
- 22 Company's non-lighting rate service classifications.

filed in this proceeding.

1 III. CLASS COST OF SERVICE STUDY

- 2 A. Class Cost of Service Concepts and Operating System Components
- Q. Please explain what is meant by "class cost of service."
- 4 The Company currently provides service to its customers in a number of A. 5 rate classifications that are designated for residential or non-residential service. The non-6 residential customer group is differentiated by customer size and the voltage level at 7 which the Company provides service. The current customer classes are Residential, 8 Small General Service ("SGS") and Large General Service ("LGS") (all of which have 9 their service delivered at a low secondary voltage level); Small Primary Service ("SPS") 10 and Large Primary Service ("LPS") (delivery at a high voltage level); Large 11 Transmission Service ("LTS") (delivery at a "transmission" voltage level) and Lighting 12 Service (both area and street lighting). A class cost of service study provides a basis for 13 allocating and/or assigning the Company's total jurisdictional cost of providing electric 14 service to these various customer classes in a manner that reflects cost causation. The 15 results of a class cost of service study with equalized rates of return are often referred to 16 as "class revenue requirements." Mr. Warwick conducted a class cost of service study 17 for this case, under my supervision, and he is sponsoring that study in direct testimony
- 19 Q. How are the results of a class cost of service study used by the 20 Company?
- A. These study results are typically used to develop the target level of annual

¹ The test year in this case is the 12 months ending September 30, 2011, with certain pro forma adjustments discussed in the direct testimony of Ameren Missouri witness Gary S. Weiss, including as adjusted for customer growth through July 31, 2011.

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- 1 revenue that the Company should recover from each customer class through the
- 2 application of the rates or charges within the Company tariffs under which the various
- 3 customer classes are being served.
- 4 Q. Please explain your use of the term "rate design."
- 5 A. Generically speaking, my use of the term "rate design" refers both to the 6 process of establishing the specific charges (e.g. monthly customer charges, dollars per 7 kilowatt of demand and/or cents per kilowatt-hour energy charges) for each customer 8 class, as well as to the actual structure of an individual class rate. The rate design, or 9 structure, of a given class rate may range in complexity from a simple structure 10 consisting of a monthly customer charge and a flat charge per kilowatt-hour (such as the 11 Company's summer Residential rate), to a more complex set of customer, demand, 12 energy and reactive charges (such as the Company's SPS, LPS and LTS rates). In all 13 instances, however, the charges within a specific rate classification are established such 14 that the application of these individual charges to the total annual customer class 15 electrical usage will result in the collection of the targeted annual revenue requirement of 16 each of the Company's retail rate classes.
 - Q. As background for additional discussion on the class cost of service study the Company is sponsoring in this case, please provide a general description of the various facilities utilized by the Company in producing and delivering electricity to its customers.
- A. Schedule WLC-E4 of my testimony is a simplified diagram illustrative of the Ameren Missouri electric system, showing how power flows from the generating station and is then transmitted and distributed to the home of a residential customer.

- 1 Other customers receiving service at higher voltage levels are also served from various
- 2 points on the same system.
- Q. Please describe, in more detail, how the Company's system operates.
- 4 A. As illustrated in Schedule WLC-E4, electrical power is produced at the
- 5 Company's generating stations at voltage levels ranging from 11,000 to 23,750 volts. To
- 6 achieve transmission operating economies, this voltage is raised, or stepped up, by power
- 7 transformers at the generating station sites to voltages generally ranging from 138,000 to
- 8 345,000 volts for transmission to the Company's bulk substations that are strategically
- 9 located throughout its service area.

- Q. What is the function of the Company's bulk substations?
- 11 A. Bulk substations receive electrical power at transmission voltage levels.
- 12 They then lower, or step-down, this power to transmission or distribution voltages
- generally ranging from 138,000 volts to 34,500 or 69,000 volts. Such power is then
- distributed over the Company's 34,500 or 69,000 volt distribution lines to distribution
- substations located throughout the Company's service area.
- Q. What function do distribution substations perform?
- 17 A. Distribution substations, which are far more numerous than bulk
- substations, provide a further reduction in the electrical power voltage to a range of 4,160
- 19 to 13,800 volts within various portions of the Company's service area. The power is then
- distributed over the Company's 4,160 to 13,800 volt distribution lines to points at or near
- 21 the premises of the Company's customers.

1	Q.	After electrical power at 4,160 to 13,800 volts is delivered to a point at
2	or near a cus	stomer's premises, do any further reductions in voltage take place?

A. Yes, in most instances. While approximately 720 of the Company's largest industrial and commercial customers in Missouri take service at the 4,160 to 13,800 volt range or higher, the majority of the Company's customers are served at lower voltages, ranging from 120 to 480 volts. The lower voltages are achieved through the use of numerous line transformers located at or near the customer's premises. This low voltage electrical power from the line transformer is delivered to a customer's premises over low voltage lines referred to as "secondary" and "service" lines.

Q. What voltages are utilized in providing electric service to residential customers?

A. Residential customers are served at either 120 or 240 volts depending upon the customer's service entrance panel size and connected appliances.

Q. What voltages are utilized to serve non-residential customers?

A. Non-residential customers on the Company's SGS or LGS rates are served at voltages from 120 to 480 volts due to the wide variety of electrical consuming devices utilized by such customers. Customers in the latter voltage range are often referred to as "secondary" voltage customers. Other larger non-residential customers receiving service at 4,160 to 13,800 volts are referred to as "primary" voltage customers. The Company also serves approximately 75 customers in Missouri at voltages above the 13,800 volt level. These are referred to as "high voltage" or Rider B customers. Additionally, the Company serves its only current LTS customer at 161 kilovolts ("kV") via a unique transmission service arrangement.

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- Q. In your description of the Ameren Missouri generation, transmission and distribution system are you using the term "lines" in a general sense?
- A. Yes. Those "lines" may be overhead conductors or underground cables.

 Overhead "lines" include all poles, towers, insulators, crossarms and all other hardware
- 5 associated with such installations. Underground "lines" include direct buried cable, as
- 6 well as that installed in single or multi-duct conduit, and other associated hardware.
- 7 B. Costs and Revenues in Class Cost of Service Study
 - Q. Please describe the components of costs and revenues that are contained in the class cost of service study that the Company is filing in this case.
 - A. A traditional cost of service study incorporates the aggregate jurisdictional (Missouri or Federal Energy Regulatory Commission ("FERC")) accounting and financial data normally submitted to a regulatory commission by a utility in support of a request for an adjustment in its overall rate levels. Such a study is required to determine the level of revenues necessary for the Company to recover its operating and maintenance expenses, depreciation applicable to its investment in utility plant, property taxes, income and other taxes, and provide a fair rate of return to the Company's investors, through its rates. The Company's class cost of service study allocates, or distributes, these total jurisdictional costs to the various customer classes in a cost-based manner that fairly and equitably reflects the cost of the service being provided to each customer class.

1	Q.	Was a Missouri jurisdictional cost of service study performed by the
2	Company's 1	Regulatory Accounting group the starting point for the class cost of
3	service study	y performed and sponsored by Mr. Warwick?
4	A.	Yes, it was. As I indicated above, the Company's class cost of service
5	study is a con	ntinuation and refinement of the Missouri jurisdictional cost of service study
6	discussed in	the direct testimony of Mr. Weiss, resulting in a determination of the costs
7	incurred in pr	roviding electric service to each of the Company's customer classes.
8	Q.	What major categories of cost were examined in the development of
9	the class cos	t of service study being sponsored by Mr. Warwick in this case?
10	A.	A detailed analysis was made of all elements of the Company's Missouri
11	jurisdictional	rate base investment and expenses during the test year for the purpose of
12	allocating suc	ch items to the Company's present customer classes. This analysis consisted
13	of classifying	g the various elements of cost into their customer-related, energy-related and
14	demand-relat	ed cost categories.
15	Q.	Why are the Company's costs classified into these three categories?
16	A.	It is generally accepted within the industry that the costs in each of these
17	categories re	sult from different cost causation factors and, hence, should be allocated
18	among the va	arious customer classes by different methodologies which consider such cost
19	causation.	
20	Q.	What are customer-related costs?
21	A.	Customer-related costs are the minimum costs necessary to just make
22	electric servi	ce available to the customer, regardless of the extent to which such service is
23	utilized. Ex	camples of such costs include monthly meter reading, billing, postage,

customer accounting and customer service expenses, as well as a portion of the costs associated with the required investment in a meter, the service line, the transformer and other distribution system facilities. The customer components of the distribution system are those costs necessary to simply make service available to a customer, without the consideration of the amount of the customer's electrical use. The January 1992 edition of the Electric Utility Cost Allocation Manual, published by the National Association of Regulatory Utility Commissioners ("NARUC"), references both customer-related and demand-related cost components for all distribution plant and operating expense accounts other than for substations and street lighting plant accounts.

Q. What are energy-related costs?

A. Energy-related costs are those costs related directly to the customer's consumption of electrical energy (kilowatt-hours) and consist primarily of fuel, fuel handling, interchange power costs, and a portion of production plant maintenance expenses.

Q. What are demand-related costs, which are the third category of costs to which you referred?

A. Demand-related costs are rate base investment and related operating expenses associated with the facilities necessary to supply a customer's service requirements during periods of maximum, or peak, levels of power consumption each month. During such peak periods, this usage is expressed in terms of the customer's maximum power consumption, commonly referred to as kilowatts of demand. As so defined, demand-related costs include those costs in excess of the aforementioned customer and energy-related costs. The major portion of demand-related costs consists of

- 1 generation and transmission plant and the non-customer-related portion of distribution
- 2 plant.
- Q. Was there an additional category of cost that was examined in this
- 4 analysis?
- 5 A. Yes, as discussed in Mr. Warwick's testimony, costs associated with the
- 6 Company's energy efficiency programs were split into two categories: 1) program costs
- 7 reflected as a regulatory asset in Mr. Weiss' jurisdictional revenue requirement study and
- 8 2) energy efficiency revenue requirements addressed in the Company's January 2012
- 9 Missouri Energy Efficiency Investment Act ("MEEIA") filing that are also reflected in
- 10 Mr. Weiss' jurisdictional study.
- 11 C. <u>Cost Allocations</u>
- Q. After the Company's costs are categorized into one of the three major
- classifications, how are they allocated to the various rate classes?
- A. Customer-related costs are normally allocated on the basis of the number
- of customers associated with each rate class. In some instances involving non-residential
- 16 customer multiple metering installations, weighting factors may also be used. In
- addition, where specific costs can be identified as being attributable to one or more
- specific customer classes, such as credit and collection expenses, a direct assignment of
- 19 such costs will be made.
- 20 Energy-related costs are allocated to the customer classes on the basis of their
- 21 respective energy (kilowatt-hour) requirements at the generation level of the Company's
- 22 system, which includes applicable system energy losses. The use of this common point
- on the Company's system to allocate such costs ensures that each customer class will be

- 1 assigned the appropriate portion of the Company's total incurred variable fuel and
- 2 purchased power costs.

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- 3 Demand-related distribution costs are allocated to customer classes using one or 4 more allocation factors based upon customer class coincident, class non-coincident or 5 individual customer non-coincident kilowatt demands. Demand-related transmission 6 costs are allocated to customer classes on a 12 coincident peak ("CP") basis, as that 7 methodology is consistent with the method utilized to assign cost responsibility of the 8 demands of the Ameren operating companies and all of the other utilities participating in 9 the Midwest Independent Transmission System Operator, Inc. ("MISO"), per the MISO's 10 Attachment O Rate Formulae in the Open Access Transmission, Energy and Operating 11 Reserve Markets Tariff on file at the FERC. Demand-related production costs are 12 allocated on the basis of the Average & Excess ("A&E") Demand Method referenced in 13 the NARUC cost allocation manual. As not all customers have demand meters, customer 14 class and individual customer kilowatt demand data is obtained from the Company's 15 ongoing load research program.
 - Q. As generation (production) plant consists of more than half of the Company's total plant investment, please summarize the most common cost allocation methodologies employed within the electric utility industry for the allocation of generation plant.
- A. The most common and generally accepted methodologies used for the allocation of generation plant can be grouped into the following three categories:
- Peak Responsibility Costs are allocated on the basis of the relative customer
 class demands at the time of occurrence of the company's system peak during the

1	period of study (referred to as the "coincident peak" or "CP" method). One or
2	more system peak hours, or a number of monthly or seasonal system peaks, are
3	normally used in applying the CP methodology.
4	Non-Coincident Peak - Costs are allocated on the basis of the maximum peak
5	demand of each customer class at any time during the study period, without
6	regard to the time of occurrence or magnitude of the company's coincident system
7	peaks (referred to as the "NCP" method). As with the CP method, the NCP
8	methodology can employ one or more customer class peaks in its application.
9	Average and Excess - Costs are allocated based upon a weighting of average class
10	demand throughout the year (kilowatt-hours ÷ 8,760 hours) and class "excess"
11	demand(s). The excess demand(s) used in this determination are the class NCP
12	demand(s) in excess of the average class demand during the study period. As
13	with the CP and NCP methodologies, this method can also employ the use of one
14	or more customer class NCP demands to determine class excess demands.
15	Average class demands are weighted by the Company's annual system load factor
16	("LF") (LF = average demand ÷ peak demand) and excess class demands are
17	weighted by the complement of the load factor $(1.0 - LF)$ in the development of
18	cost allocation factors using this methodology.
19	Q. Which cost allocation methodology is the Company using for
20	production plant in its class cost of service study in this case?
21	A. The Company is utilizing the 4 NCP version of the Average and Excess
22	demand methodology for allocating production plant in this case.

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- Q. From a generation perspective, what were the considerations associated with the Company's election to utilize the A&E demand allocation methodology for production plant in this case?
- 4 Two major factors associated with generation capacity planning prompted A. 5 the use of the A&E demand cost allocation methodology. Generally, system peak 6 demands and, to a somewhat lesser extent, excess customer demands, are the motivating 7 factors which influence the amount of capacity the Company must add to its generation 8 system to provide for its customers' maximum demands. However, the type of capacity 9 (base, intermediate or peaking) which the Company must add is not dictated by 10 maximum customer demand alone, but also by the annual energy, or kilowatt-hours, 11 which will be required to be generated by such capacity, i.e., the generation unit's 12 utilization factor. A cost allocation methodology that gives weight to both a) class peak 13 demands and b) class energy consumption (average demands) is required to properly 14 address both of the above considerations associated with capacity planning. The A&E 15 methodology gives weight to both of these considerations by its inclusion of both average 16 class demands, which are kilowatt-hours divided by total hours in the year (8,760) and 17 the excess NCP demands of each class. As indicated earlier, the Company's A&E cost 18 allocation study used both the 4 NCP and average class demands in the determination of 19 class excess demands.
 - Q. Is there also quantitative support for the Company's selection of the 4 NCP version of the A&E demand allocation methodology for production plant?
- A. Yes. The 4 NCP version of the A&E methodology, which uses the four maximum non-coincident monthly peak demands for each customer class during the test

- 1 year, was selected due to the fact that 14 of the 20 maximum 4 NCP monthly demands
- 2 for the Company's major (i.e., non-lighting) customer classes occurred during the
- 3 Company's summer peak demand months of June-September. The use of the 4 NCP
- 4 demand option, rather than a lesser number of monthly NCP demands, also prevents the
- 5 demand allocator for any customer class from being unduly influenced by any extreme
- 6 demand in a given month.
- Q. Is there any additional support for the Company's selection of the NCP version of the A&E demand allocation methodology for production plant?
- 9 A. Yes. The Commission's order in the Company's 2010 electric rate case
- 10 (Case No. ER-2010-0036) found that the Company's A&E method was the most reliable
- of the submitted methods. Additionally, its order in the Company's most recently
- adjudicated electric rate case (Case No. ER-2011-0028) also provided support for the use
- of the A&E method.
- Q. After the determination of customer, energy and demand allocation
- 15 factors for the various components of the Company's costs, what was the next step
- in the completion of the Company's class cost of service study?
- 17 A. The next step was to apply the allocation factors developed for each class
- to each component of rate base investment and each of the elements of expense specified
- in the jurisdictional cost of service study. The aggregation of such cost allocations
- 20 indicates the total annual costs, or annual revenue requirement, at equalized rates of
- 21 return associated with serving a particular customer class. The operating revenues of
- 22 each customer class minus its total operating expenses provide the resulting net operating
- 23 income for each class. This net operating income divided by the rate base allocated to

- each class will indicate the percentage rate of return being earned by the Company from a
- 2 particular customer class. This application of allocation factors to Missouri electrical
- 3 jurisdictional costs, the aggregation of the total annual cost to each of the customer
- 4 classes and a summary of the results of the Company's class cost of service study are
- 5 described in detail in Mr. Warwick's direct testimony.
- 6 Q. Earlier you mentioned the categorization of energy efficiency related
- 7 costs. How were these costs allocated to the affected customer classes?
- 8 A. Costs in the aforementioned category 1) (Program costs) were directly
- 9 assigned to the rate classes based on utilization of program benefits to date. The revenue
- 10 requirements in the aforementioned category 2) were allocated consistent with the
- 11 Company's MEEIA filing.
- 12 **D.** <u>Study Results</u>
- Q. Referring now to the results of the Company's class cost of service
- study performed by Mr. Warwick in this case, please identify Schedule WLC-E5.
- 15 A. Schedule WLC-E5 (which is the same as Mr. Warwick's Schedule
- 16 WMW-E1) summarizes the results of the Company's class cost of service study,
- indicating the rate of return on rate base currently being earned on the service being
- provided to the Company's major retail customer classes. As indicated earlier, the basic
- starting point for this study was the Missouri jurisdictional cost of service study.
- Q. What general conclusions can be drawn from the information
- 21 contained in Schedule WLC-E5?
- A. The Residential, and Lighting Service classes are providing a below
- 23 average rates of return, while all other classes are providing above average rates of return.

- 1 Overall, as is suggested by the filing of this case, the Company is earning an inadequate
- 2 return on its rate base.

- E. Class Revenue Proposals
- 4 Q. Please identify Schedule WLC-E6.
- 5 A. Schedule WLC-E6 summarizes the class revenue requirements necessary
- 6 to give the Company an opportunity, based upon test year figures with the pro forma
- 7 adjustments made by Mr. Weiss, to achieve an equal rate of return from each of its
- 8 customer classes. This information was developed from the cost of service data
- 9 contained in Schedules WMW-E1 and WMW-E2 of Mr. Warwick's direct testimony, and
- is based upon the Company's proposed level of Missouri retail revenues.
 - Q. Why are the equal rates of return for all customer classes an
- 12 appropriate starting point when designing electric utility rates?
- 13 A. There are several reasons why equal class rates of return are an
- appropriate starting point in the consideration of rate design. First and foremost is the
- 15 consideration of equity and fairness to all electric customers. Purely from a cost
- perspective and ignoring all other factors, to overcharge one customer class in order to
- subsidize another class is not supportable.
- A second important consideration in support of equal class rates of return is the
- 19 goal of encouraging cost effective utilization of electricity by customers. To make
- appropriate decisions regarding the most efficient and effective use of electricity, as well
- 21 as the acquisition of electrical consuming equipment, customers require correct and
- appropriate price signals from the Company's electric rates.

- 1 A third consideration is that of competition. Cost-based electric rates permit the
- 2 Company to compete effectively with alternative fuels, co-generation and other electric
- 3 providers for new commercial and industrial customers.
- 4 Q. Once the annual cost-based revenue requirements are developed by
- 5 this process for all of the Company's customer classes, would the design of specific
- 6 rates for each class be the next and final step in the overall rate development
- 7 process?
- 8 A. If one was to base class rates solely on class cost of service and ignore
- 9 other relevant factors, the response would be yes. However, the results of Mr. Warwick's
- study produced the following revenue increases by customer class:

Customer Class	Cost of Service Increase
Residential Service	24.4%
Small General Service	6.8%
Large General and Small Primary Service	4.8%
Large Primary Service	7.3%
Large Transmission Service	8.6%
Lighting Service	22.8%

1	Q. Is the Company proposing that these cost-based class revenue	
2	requirements be utilized in developing class rates in the case?	
3	A. No, the Company is proposing a departure from class reven	ıue
4	requirements or rate design being established solely on the basis of equal class rates	of
5	return as shown in its class cost of service study.	
6	Q. Why is the Company proposing to vary from the cost-based reven	ue
7	requirements?	
8	A. The Company recognizes that factors other than cost of service a	are
9	relevant to determining class revenue requirements. These factors may include, but a	are
10	not limited to, revenue stability, rate stability, effectiveness in yielding total reven	iue
11	requirements, public acceptance, and value of service.	
12	Q. What is the Company's proposal for allocating the revenue increa	ıse
13	requested in this case?	
14	A. The Company is proposing to allocate the revenue increase requested	in
15	this case across-the-board, on an equal percentage of present revenue basis.	
16	Q. Please explain the Company's proposal to allocate the reven	ue
17	increase in this case on an equal percentage or across-the-board basis rather th	an
18	based solely on class cost of service study results.	
19	A. While cost-based rates are an important starting point in developing cla	ass
20	revenue targets and rate design, the aforementioned other factors of revenue stability, ra	ate
21	stability, effectiveness in yielding total revenue requirements, public acceptance, a	nd
22	value of service should be considered when determining class revenue requirements a	ınd
23	designing rates. Considering the prolonged nature of the country's challenging econom	nic

- 1 conditions, these other factors take on more importance. Judgmental weighting of all
- these factors drove the Company's equal percentage of increase proposal.
- Q. Did the Commission's order in Case No. ER-2011-0028 contain any
- 4 language to support establishing class revenue requirements based on factors other
- 5 than class cost of service results?
- A. Yes. At pages 115-116 the order states, "In general, it is important that
- 7 each customer class carry its own weight by paying rates sufficient to cover the cost to
- 8 serve that class. That is a matter of simple fairness in that one customer class should not
- 9 be required to subsidize another. Requiring each customer class to cover its actual cost of
- service also encourages cost effective utilization of electricity by customers by sending
- 11 correct price signals to those customers. ²⁸⁵ However, the Commission is not required to
- precisely set rates to match the indicated class cost of service. Instead, the Commission
- has a great deal of discretion to set just and reasonable rates, and can take into account
- 14 other factors, such as public acceptance, rate stability and revenue stability in setting
- 15 rates."
- 16 Q. Please identify Schedule WLC-E7.
- 17 A. Schedule WLC-E7 summarizes the proposed class revenue requirements
- 18 necessary to give the Company an opportunity, based upon test year figures, to achieve
- 19 its jurisdictional rate of return.
- Q. What was the source of the billing unit data used in the design of the
- 21 Company's proposed rates?
- A. Ameren Missouri witness James R. Pozzo is providing direct testimony
- 23 discussing the billing unit data used in the design of the proposed rates. The data

1 contained in Schedules JRP-E1 through JRP-E6 of Mr. Pozzo's direct testimony in this 2 case was used as a resource for the individual class billing units. The data in these 3 schedules are based upon the Company's weather normalized sales during the test year in 4 this case as discussed in the direct testimony of Ameren Missouri witness Steven M. 5 Wills. 6 IV. **CLASS RATES** 7 Q. Please describe the Company's specific rate design proposal in this 8 case. The Company's rate design proposal in this case is as follows: 10 A. 11 (1) Energy Efficiency Charge(s). For the affected classes, the energy 12 efficiency charges were set to achieve the "unbundled" annual energy efficiency 13 related revenue requirement as developed in Mr. Warwick's class cost of service 14 study, and the charges were seasonally differentiated based on the existing 15 proportionality of the class' summer and winter non-customer charge revenues. 16 Residential Rate Design. The Customer Charge was the initial rate (2) 17 component developed. Mr. Warwick's class cost of service study produced a 18 customer charge of approximately \$20 per month. Although the existing 19 customer charge of \$8.00 per month is only 75¢ greater than its level of \$7.25 per 20 month in March 2000, the Company has limited this charge to \$12.00 in its 21 proposed Residential Rate. The remaining energy charges of the Residential Rate 22 were increased to achieve the annual revenue target or across-the-board increase 23 less the unbundled energy efficiency revenue requirement for this class. 24 (3) Small General Service Rate Design. The Customer Charge was 25 the initial rate component developed. Mr. Warwick's class cost of service study

21

22

23

(5)

1	produced a weighted customer charge of approximately \$22 per month for
2	customers in this class. The current level is \$9.74 per month for single phase
3	service and \$19.49 for three phase service. The Company has limited this charge
4	to \$14.61 for single phase service and \$29.24 for three phase service in its
5	proposed Small General Service Rate. The remaining energy charges of the
6	Small General Service Rate were increased to achieve the annual revenue target
7	or across-the-board increase less the unbundled energy efficiency revenue
8	requirement for this class.
9	(4) Retention of Certain Prior Uniform Features of the Company's
10	non-Residential, Commercial and Industrial Customer classes. The Company is
11	proposing to retain the following rate design features that are currently in effect.
12	Remaining rate designs for these Service Classifications will be discussed later.
13	(a) The customer charges on the SPS, LPS, and LTS rate schedules are
14	proposed to remain the same.
15	(b) The rates (\$ per kW) for Rider B voltage credits are proposed to
16	remain the same under all applicable rate schedules.
17	(c) The rate (\$ per billed kVar) associated with the Reactive Charge is
18	proposed to remain the same under all applicable rate schedules.
19	(d) The rate (\$ per month) associated with the Time-of-Day meter

charge is proposed to remain the same under all applicable rate schedules.

The demand and energy charges on the LGS and SPS rate schedules were

increased uniformly to achieve the annual revenue requirement of these classes

Large General Service and Small Primary Service Rate Design.

1	less the unbundled energy efficiency revenue requirement after uniformity
2	adjustments were made, as described in (4) above.
3	(6) Large Primary Service Rate Design. The demand and energy
4	charges on the LPS rate schedule were increased uniformly to achieve the annual
5	revenue requirement less the unbundled energy efficiency revenue requirement of
6	this class after uniformity adjustments were made, as described in (4) above.
7	(7) Large Transmission Service Rate Design. The demand and energy
8	charges on the LTS rate schedule were increased uniformly to achieve the annual
9	revenue requirement of this class after uniformity adjustments were made, as
10	described in (4) above.
11	(8) Lighting Service – The Company has three active lighting service
12	classifications: 1) Street & Outdoor Area Lighting - Company-Owned 5(M);
13	2) Street and Outdoor Area Lighting - Customer-Owned 6(M); and 3) Municipal
14	Street Lighting – Incandescent 7(M).
15	Mr. Warwick's class cost of service study combined the Lighting Service
16	classifications and, as noted above, the study produced a cost-based increase of 22.8%.
17	However, as mentioned above, the Company is proposing an across-the-board increase
18	(i.e., 14.6%) for its major customer classes in this case.

17

18

19

1 Q. Are there other changes to the Lighting tariffs being proposed in this case?

2 Yes. At page 63 of the Commission's order in the Company's most A. 3 recently adjudicated electric rate case (Case No. ER-2011-0028) it states, "Based on its 4 findings of fact and conclusions of law, the Commission decides that Ameren Missouri 5 should eliminate the pole and span charge gradually. To avoid the rate shock that would 6 result from the complete elimination of this charge, the Commission directs Ameren 7 Missouri to initially reduce the monthly pole and span charge by half. The reduced 8 revenue resulting from this reduction in the pole and span charge shall be collected from 9 the entire 5M classification within the lighting class. The Commission will consider the 10 total elimination of the pole and span charge in Ameren Missouri's next rate case." 11 Consistent with this language, the Company is proposing to discontinue these charges in 12 this case with the resulting revenue reduction to be collected from the entire 5M 13 classification within the lighting class. This approach results in the remaining 5(M) rates 14 being increased by approximately 20%, rather than the across-the-board increase of 14.6%. 15

- Q. Proposed monthly customer charges for both the Residential and Small General Service Classifications reflect percentage increases larger than the across-the-board percentage increase level proposed for these classes. Please explain.
- A. First, it should be noted that the combination of proposed customer and energy charges for each of these respective classes produces the overall percentage increase being requested for each of the classes in this case (i.e. 14.6%). Second, as discussed in the MEEIA testimony of Company witness William R. Davis, Ameren

- 1 Missouri has embarked on an energy efficiency and demand response effort to give 2 customers more control over their energy usage and to lower their bills via reduced 3 consumption. Therefore, the Company is proposing larger increases in customer charges 4 and corresponding reductions in the percentage of revenue derived from volumetric or 5 consumption charges for these classes. This proposal reflects cost causation principles 6 (i.e., moves customer charges closer to class cost of service study results), helps to 7 mitigate the negative financial impact on the Company associated with decreased 8 volumetric or energy use, and, at the same time, does not discourage energy efficiency. 9 Shifting more of the classes' revenue requirement to monthly customer charges helps to 10 remove some of the financial disincentive to embark on an energy efficiency campaign, 11 and at the same time affords the Company a more reasonable opportunity to earn a fair 12 rate of return regardless of weather conditions. Excluding the impacts of the Company's 13 current Low Income Pilot Program Charges (i.e., "Keeping Current Program" as 14 discussed in the direct testimony of Ameren Missouri witness Mark Mueller), 15 approximately 91% and 93%, respectively, of the present test year revenues of these 16 classes are collected via current energy or volumetric charges with the remaining 9% and 17 7%, respectively, being collected via customer charges. The proposed customer charges 18 would increase the customer charge contribution to total revenues for the Residential and 19 Small General Service classes to 10% and 7%, respectively.
- Q. Does this conclude your direct testimony?
- A. Yes, it does

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Electric Service. Case No. ER-2012-0166
AFFIDAVIT OF WILBON L. COOPER
STATE OF MISSOURI)) ss CITY OF ST. LOUIS)
Wilbon L. Cooper, being first duly sworn on his oath, states:
1. My name is Wilbon L. Cooper. I work in the City of St. Louis, Missouri, and
I am employed by Union Electric Company d/b/a Ameren Missouri as Manager of Rates and
Tariffs.
2. Attached hereto and made a part hereof for all purposes is my Direct
Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of <u>a5</u>
pages and Schedules WLC-E through WLC-E , all of which have been prepared in
written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached testimony
Subscribed and sworn to before me this 2 day of February, 2012. Mary Hoyt Notary Public
Mary Hoyt - Notary Public Mary Hoyt - Notary Public Notary Public Mary Hoyt - Notary Public Notary Seal, State of Missouri - Jefferson County Commission #10397820 My Commission Expires 4/11/2014

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO. 5	40th Revised	SHEET NO.	28	
CANCELLING MO.P.S.C. SCHEDULE NO. 5	39th Revised	SHEET NO.	28	
APPLYING TO MISSOURI SER	VICE AREA			
SERVICE CLASSIFI RESIDENTIAL S				
* Rate Based on Monthly Meter Readings				
Summer Rate (Applicable during 4 m				
Customer Charge - per month		\$12.00		
Low-Income Pilot Program Char	ge - per month	\$0.03		
Energy Charge - per kWh		11.28¢		
Energy Efficiency Program Cha	rge - per kWh	0.59¢		
Winter Rate (Applicable during 8 m	nonthly billing			
Customer Charge - per month		\$12.00		
Low-Income Pilot Program Char	ge - per month	\$0.03		
Energy Charge - per kWh				
First 750 kWh		8.03¢		
Over 750 kWh		5.32¢		
Energy Efficiency Program Cha	rge - per kWh	0.35¢		
Optional Time-of-Day Rate				
Customer Charge - per month		\$25.00		
Low-Income Pilot Program Char	ge - per month	\$ 0.03		
Energy Charge - per kWh (1)				
Summer (June-September bil	ling periods)			
All On Peak kWh		16.38¢		
All Off Peak kWh		6.71¢		
Energy Efficiency Program		0.59¢		
Winter (October-May billin	g periods)	0 674		
All On Peak kWh All Off Peak kWh		9.67¢ 4.78¢		
Energy Efficiency Program	Charge - per kWh	0.35¢		
	ours applicable herein shall			
Fuel and Purchased Power Adjustment kilowatt-hours (kWh) of energy.	(Rider FAC) . Applicable to	o all mete	red	
	<u>Payments</u> . Bills are due and payable within ten (10) days from date of bill and become delinquent after twenty-one (21) days from date of bill.			
Term of Use. Initial period one (1) y days' notice.	<u> </u>			
<u>Tax Adjustment</u> . Any license, franchise charge or tax levied by any taxing authobe so designated and added as a separate the jurisdiction of the taxing authority. * Indicates Change.	rity on the amounts billed item to bills rendered to c	hereunder w	ill	
indicates change.				

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

	MO.P.S.C. SCHEDULE NO. 5	28th Revised	SHEET NO. 32
CANC	CELLING MO.P.S.C. SCHEDULE NO5	27th Revised	SHEET NO. 32
PLYING TO	MISSOURI SER	VICE AREA	
	SERVICE CLASSIFI	CCATION NO. 2(M)	
	SMALL GENERAL		
* Rate Bas	ed on Monthly Meter Readings		
Summ	er Rate (Applicable during 4 m	1 3	
	Customer Charge - per month Single Phase Service	e	\$14.61
	Three Phase Service		\$29.24
	Low-Income Pilot Program Charge	- per month	\$0.05
	Energy Charge - per kWh	_	10.62¢
	Energy Efficiency Program Charge	e - per kWh (3)	0.22¢
Wint	er Rate (Applicable during 8 m		
	Customer Charge - per month		
	Single Phase Servic	е	\$14.61
	Three Phase Service		\$29.24
	Low-Income Pilot Program Charge	- per month	\$0.05
	Energy Charge - per kWh Base Use		7.91¢
	Seasonal Use(1)		4.58¢
	Energy Efficiency Program Charge	e - per kWh (3)	0.15¢
Opti	onal Time-of-Day Rate		
	Customer Charge - per month		
	Single Phase Servic	е	\$29.30
	Three Phase Service		\$58.58
	Low-Income Pilot Program Charge	- per month	\$0.05
	Energy Charge - per kWh (2) Summer (June-September bil All On Peak kWh	lling periods)	15.76¢
	All Off Peak kWh		6.42¢
	Energy Efficiency Program	Charge - per kWh (3)	0.12¢
	Winter (October-May billing		
	All On Peak kWh	J 1	10.37¢
	All Off Peak kWh		4.76¢
	Energy Efficiency Program	Charge - per kWh (3)	0.15¢
(1)	The winter seasonal energy use per month <u>and</u> in excess of the preceding May billing period, maximum monthly kWh use during a	he lesser of a) the kW or b) October billing	Wh use during the period, or c) the
(2)			
(3)	Not applicable to customers tha Section 393.1075, RSMo.	t have satisfied the opt	-out provisions of
Fuel and	Purchased Power Adjustment (Rider FAC). Applicable	e to all metered
	hours (kWh) of energy.		

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

ELECTRIC SERVICE

			31st Re			
CANCELL	ING MO.P.S.C. SCHEDULE	NO. <u>5</u>	30th Re	evised	SHEET NO.	34
			CATION NO. 3(M SERVICE RATE	1)		
* <u>Rate Basec</u>	d on Monthly Met	er Readings				
Summer			g 4 monthly bi through Septem	_		
	ustomer Charge ow-Income Pilot	_	ge - per month	·	92.34	
E	Next 200 kWh	per kW of Bi per kW of Bi	lling Demand lling Demand Billing Demar		10.33¢ 7.78¢ 5.23¢	
D	emand Charge - p	per kW of Tot	al Billing Der	mand \$	4.83	
E	nergy Efficiency	y Program Cha	arge - per kWh	(1)	0.36¢	
C.	Rate (Appl peri ustomer Charge ow-Income Pilot	iods of Octob - per month	er through May	7)	92.34 0.50	
	ase Energy Charg First 150 kWh Next 200 kWh All Over 350 l easonal Energy (per kW of Ba per kW of Ba kWh per kW of	se Demand Base Demand		6.52¢ 4.83¢ 3.79¢ 3.79¢	
D	emand Charge - p	per kW of Tot	al Billing Der	mand \$	1.79	
E:	nergy Efficiency	y Program Cha	rge - per kWh	(1)	0.21¢	
pr	t applicable to ovisions of Sec	tion 393.1075	nat have satist 5, RSMo.	fied the opt	t-out	
	al Time-of-Day	-				
	dditional Custon		per Month	\$20.30 per		
Eı	nergy Adjustment	: - per kWh		On-Peak <u>Hours(2)</u>	Off-Peal <u>Hours(2</u>	
	Gummer kWh(June- Jinter kWh(Octob	_		+1.22¢ +0.37¢		
(2	2) On-peak and c specified in	_		erein shall	be as	
	urchased Power . ours (kWh) of er		<u>Rider FAC)</u> . Ap	plicable to	all mete	rec
*Indicates	Change.					

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

	MO.P.S.C. SCHEDULE NO. 5	38th Re	evised	SHEET NO.	37
CANC	ELLING MO.P.S.C. SCHEDULE NO. 5	37th Re	evised	SHEET NO.	37
APPLYING TO	MISSOURI	SERVICE AREA			
	·	SIFICATION NO. 4(M)		
* Rate Bas	sed on Monthly Meter Readin	ngs			
Summ		uring 4 monthly bi une through Septem			
	Customer Charge - per mon	th	Ş	311.86	
	Low-Income Pilot Program	Charge - per month	l	\$0.50	
	Energy Charge - per kWh First 150 kWh per kW of Next 200 kWh per kW of All Over 350 kWh per kW	Billing Demand	I.	9.90¢ 7.46¢ 5.01¢	
	Demand Charge - per kW of Reactive Charge - per kVa Energy Efficiency Program	r		\$3.96 37.00¢ 0.40¢	
Wint	<u>er Rate</u> (Applicable d	uring 8 monthly bi ctober through May	lling	0.107	
	Customer Charge - per mon	th	Ş	311.86	
	Low-Income Pilot Program	Charge - per month	L	\$0.50	
	Base Energy Charge - per First 150 kWh per kW of Next 200 kWh per kW of All Over 350 kWh per kW	Base Demand Base Demand		6.24¢ 4.64¢ 3.63¢	
	Seasonal Energy Charge -	Seasonal kWh		3.63¢	
	Demand Charge - per kW of		and	\$1.45	
	Reactive Charge - per kVa			37.00¢	
	Energy Efficiency Program	Charge - per kWh	(1)	0.24¢	
	Not applicable to customer provisions of Section 393.		ied the op	t-out	
<u>Opti</u>	onal Time-of-Day Adjustmer Additional Customer Charg		\$20.30 per	r month	
	Energy Adjustment - per k	_	On-Peak Hours(2)	Off-Peal	
	Summer kWh(June-September Winter kWh(October-May b	<u> </u>	+0.88¢ +0.33¢		
	(2) On-peak and Off-peak specified within this			shall be	as
	Purchased Power Adjustmer -hours (kWh) of energy.	nt (Rider FAC). App	plicable to	all mete	red
*Indicat	es Change.				

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

	MO.P.	S.C.SCHEDULE NO.	<u> </u>	29th Revi	sed	SHEET NO.	39
	CANCELLING MO.P.	S.C. SCHEDULE NO.	5	28th Revi	sed	SHEET NO.	39
LYING T	·o	MISSO	URI SERVICE	AREA			
		SERVICE	CT.ASSTFTCAT	ION NO. 5(M)			
	STR	EET AND OUTDOO			IY-OWNED		
	per Unit per	r Month					
Lamp	and Fixture						
Α.	Standard h	orizontal bur	ning, encl	osed luminai:	re on exi	sting w	000
	pole:		5,				
	<u>High Pressu</u>			Mercur	y Vapor (1	<u>)</u>	
	<u>Lumens</u> 9,500	<u>Kate</u> č12 10		<u>Lumens</u>	<u>Rate</u> \$12.1 \$17.6 \$31.4	<u>:</u>	
	25,500	\$12.19		20 000	\$12.1 \$17.6	.9	
	50,000	\$31.41		54.000	\$31.4	1	
	22,722	4		108,000	\$62.8	4	
В.		ide mounted,	hood with o	open bottom g	plassware o	on exist	ing
	wood pole:						
	High Pressu	ire Sodium		Mercur	y Vapor (1)	
	<u>Lumens</u> 5,800	\$ 9.87		3,300	<u>Rate</u> \$ 9.8	7	
		\$10.78		6,800	\$10.7	8	
C.	Standard po	ost-top lumina	ire includi:	ng standard 1	7-foot pos	t:	
	High Pressu	iro Codium		Morgur	y Vapor (1	\	
	9,500	<u>Rate</u> \$22.59		3,300	<u>Rate</u> \$21.3	5	
				6,800			
D.		ed, direction			ted to in	stallati	ons
	accessible	to Company ba	sket truck:				
	High Pressu	ıre Sodium	Metal :	Halide	Mercury V	apor (1)	
	Lumens	Rate	Lumens	Rate	Lumens	Rate	
	25,500	\$22.36	34,000	\$22.36	20,000	\$22.36	
	50,000	\$35.37	100,000	\$70.70	54,000	\$35.37	
	(1) Maragura		E		d +		:
		y Vapor lamps contracts ini					
		continue to ma	_	_		_	_
		are economical		_		5	

DATE OF ISSUE	rebruary 3,	ZUIZ DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

ELECTRIC SERVICE

	MO.P.S.C. SCHEDULE NO. 5	27th Revised	SHEET NO. 40
	CANCELLING MO.P.S.C. SCHEDULE NO5	26th Revised	SHEET NO40
APPLYING TO	MISSOURI SE	RVICE AREA	
	SERVICE CLASSIF STREET AND OUTDOOR AREA LIGH	CICATION NO. 5(M) TING - COMPANY-OWNED (Cont	t'd.)
* E.	All poles and cable, where requ	aired to provide lighting	service:
	The installation of all standa in advance by customer, with facilities provided by Company.	all subsequent replacem	
F.	Incandescent lamps provided September 30, 1963, which for Company after June 30, 1981:		
		*Per Un	it
	Lamp and Fixture	Monthly	
	1,000 Lumens 2,500 "	\$11.69 15.77	
	4,000 "	18.19	
	6,000 "	20.20	
	10,000 "	27.43	
* T J -	nahan Channa		
^inai	cates Change.		
DATE OF ISS	UE February 3, 2012	DATE EFFECTIVE March	n 4, 2012

ISSUED BY Warner L. Baxter
NAME OF OFFICER St. Louis, Missouri
ADDRESS TITLE

President & CEO

Discount for Franchised Municipal Customers. A 10% discount will be applied to bills rendered for lighting facilities served under the above rates and currently contracted for by municipalities with whom the Company has an ordinance granted electric franchise as of September 27, 1988. The above discount shall only apply for the duration of said franchise. Thereafter, the above discount shall apply only when the following two conditions are met: 1) any initial or subsequent ordinance granted electric franchise must be for a minimum term of twenty (20) years and 2) Company must have a contract for all lighting facilities for municipal lighting service provided by Company in effect.

<u>Tax Adjustment</u>. Any license, franchise, gross receipts, occupation or similar charge or tax levied by any taxing authority on the amounts billed hereunder will be so designated and added as a separate item to bills rendered to customers under the jurisdiction of the taxing authority.

*Indicates Change.

DATE OF ISSUE	EFebruary 3, 20	12 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITI F	ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE					
MO.P.S.C. SCHEDULE NO. 5	18th Revised	SHEET NO. 45			
CANCELLING MO.P.S.C. SCHEDULE NO5	17th Revised	SHEET NO. 45			
APPLYING TO MISSOURI SERVICE AREA					
SERVICE CLASSIFICATION NO. 6(M) STREET AND OUTDOOR AREA LIGHTING - CUSTOMER-OWNED					
*Monthly Rate For Metered Service Customer Charge Per Meter Energy Charge	•	per month per kWh			
*Rate Per Unit Per Month For Unmetered Service					
Customer Charge per account	\$6.60	per month			
H.P. Sodium 9,500 Lumens, Standard 16,000 Lumens, Standard 25,500 Lumens, Standard 50,000 Lumens, Standard Metal Halide	Energy & Maintenance (1) \$ 3.55 N/A 6.17 8.91	\$ 1.72 2.92 4.40 6.91			
5,500 Lumens, Standard 12,900 Lumens, Standard	\$ 5.13 6.14	N/A N/A			

(1) Company will furnish electric energy, furnish and replace lamps, and adjust and replace control mechanisms, as required.

(3)

\$ 3.55

4.62

6.24

8.28

N/A

17.69

\$ 1.82

2.96

4.22

6.51

10.84

15.48

- (2) Limited to lamps served under contracts initiated prior to September 27, 1988.
- (3) Maintenance of lamps and fixtures limited to customers served under contracts prior to November 15, 1991.

N/A Not Available.

3,300 Lumens, Standard

6,800 Lumens, Standard

11,000 Lumens, Standard

20,000 Lumens, Standard

42,000 Lumens, Standard

54,000 Lumens, Standard

<u>Term of Contract</u>. One (1) year, terminable thereafter on three (3) days' notice.

<u>Discount For Franchised Municipal Customers</u>. A 10% discount will be applied to bills rendered for lighting facilities served under the above rates and currently contracted for by municipalities with whom the Company has an ordinance granted electric franchise as of September 27, 1988. The above discount shall only apply for the duration of said franchise. Thereafter, the above discount shall apply only when the following two conditions are met: 1) any initial or subsequent ordinance granted electric franchise must be for a minimum term of twenty (20) years and 2) Company must have a contract for all lighting facilities for municipal lighting service provided by Company in effect.

*Indicates Change.

Mercury Vapor

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

MO.P.S.C. SCHEDULE NO	o. 5		28th Revi	sed	SHEET NO.	50
CANCELLING MO.P.S.C. SCHEDULE NO	D. 5		27th Revi	sed	SHEET NO.	50
APPLYING TO MI	ISSOURI SE	RVICE ARE	:A			
SERV MUNICIPA	VICE CLASSII L STREET LI	FICATION N	O. 7(M) NCANDESCEN	<u>1T</u>		
*Rate per Lamp per Month						
			ncandescen			
	1,000	2,500	4,000	6,000	10,000	
Wood Pole Rates	<u>Lumen</u> \$4.48	<u>Lumen</u> \$6.82	<u>Lumen</u> \$9.29	<u>Lumen</u> \$12.35	<u>Lumen</u> \$16.91	
	·	•	·		·	
Ornamental Pole. Add \$7.35 p	er month pe	er pole to	above Woo	d Pole Rat	es.	
* <u>Customer-Owned Street Lighting</u> owns all street lighting facil						and
For Metered Service:						
Customer Charge per Mete	er		\$15.	36 per mor	nth	
1) Secondary Service			4.	48¢ per kV	<i>l</i> h	
2) Primary Service - Ric	der C shall	be applie	ed.			
Customer shall install loop, space and mounting		_	_	_	_	eter
Tax Adjustment. Any license charge or tax levied by any to be so designated and added as the jurisdiction of the taxing Payments. Bills are due and positive of the taxing for all of an initial or succes agreement for the maximum per and said agreement will con periods unless terminated by sixty (60) days prior to any a	axing author a separate authority. Payable with ears. Custon decing ten-yearing for white tinue in either par	ority on to item item item item item item item item	che amounts pills rend o) days fro ot legally act term a legally a reafter fo	s billed hered to cu	bill. ed to control o, may sign to control sive one-y	vill nder ract n an act, year
*Indicates Change.						
DATE OF ISSUE February 3, 2	012	DATE EFFE	CTIVE	March	4, 2012	

MO.P.S.C. SCHEDULE NO5	15th Re	evised	SHEET NO. 67.1		
CANCELLING MO.P.S.C.SCHEDULE NO. 5	14th Re	evised	SHEET NO. 67.1		
APPLYING TO MISSOURI SERV	ICE AREA				
SERVICE CLASSIFICATION NO. 11(M) LARGE PRIMARY SERVICE RATE					
* Rate Based on Monthly Meter Readings					
Summer Rate (Applicable during 4 monthly billing					
periods of June th	rough September)			
Customer Charge - per month		\$311.	86		
Low-Income Pilot Program Charge - p	per month	\$50.	00		
Energy Charge - per kWh		3.	27¢		
Demand Charge - per kW of Billing 1	Demand	\$19.	54		
Reactive Charge - per kVar		37.	00¢		
Energy Efficiency Program Charge -	per kWh (1)	0.	38¢		
Winter Rate (Applicable during 8 periods of October	=	ng			
Customer Charge - per month		\$311.	86		
Low-Income Pilot Program Charge - 1	per month	\$50.			
Energy Charge - per kWh		·	89¢		
Demand Charge - per kW of Billing	Demand				
Reactive Charge - per kVar					
Energy Efficiency Program Charge - per kWh (1) 0.24¢					
(1) Not applicable to customers that has Section 393.1075, RSMo.	_				
Optional Time-of-Day Adjustments					
Additional Customer Charge - per mo	onth	\$20.30 per	month		
Energy Adjustment - per kWh	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	On-Peak	Off-Peak		
2110137 11010000000 F01 111111		Hours(2)	Hours(2)		
Summer kWh(June-September billin	g periods)	+0.63¢	-0.35¢		
Winter kWh(October-May billing p		+0.29¢			
(2) On-peak and off-peak hours a within this service classifica		in shall be	as specified		
Fuel and Purchased Power Adjustment (Rider kilowatt-hours (kWh) of energy.	FAC). Applicab	ole to all me	tered		
Payments. Bills are due and payable withi become delinquent after twenty-one (21) da			f bill and		
Term of Use. One (1) year, terminable the			notice.		
Tax Adjustment. Any license, franchise, charge or tax levied by any taxing author be so designated and added as a separate if the jurisdiction of the taxing authority.	ity on the amou	unts billed h	nereunder will		
*Indicates Change.					
DATE OF ISSUE February 3, 2012	DATE EFFECTIVE	March	4, 2012		

	CANCELLING MO.P.S.C.SCHEDULE NO. 5	9th	Revised	SHEET NO.	67.4
PPLYING TO	MISSOURI SERVICE AREA				
	MISCELLANEOUS CHARGE	ES_			
Α.	Reconnection Charges per Connection Point	<u>-</u>			
	Sheet No. 106, Par. B-3 (Annually Recurring Sheet No. 184, Par. I (Reconnection of Second			\$30.00 \$30.00	
*B.	Supplementary Service Minimum Monthly Cha	arge	<u>:s</u>		
	Sheet No. 103, Par. C-3				
	Charges applicable during 4 monthly billing periods of June through September	<u>-</u>	Primary Ser	rvice Rate	
	Customer Charge per month, plus Low-Income Pilot Program Charge - per mon All kW @	nth	\$5	1.86 0.00 9.54	
	Charges applicable during 8 monthly billing periods of October through May		Primary Ser	rvice Rate	
	Customer Charge per month, plus Low-Income Pilot Program Charge - per mon All kW @	nth	\$5	1.86 0.00 8.88	
С.	Service Call Charge. Customer's report charged a \$50.00 fee for a service cal problem is within the customer's electric	1,	if it is d		
simila hereu	djustment. Any license, franchise, groar charge or tax levied by any taxing aut ader will be so designated and added a red to customers under the jurisdiction of	hor s a	ity on the a	amounts bil	lled
*Indi	cates Change.				

ISSUED BY Warner L. Baxter President & CEO St. Louis, Missouri NAME OF OFFICER TITLE ADDRESS

MO. P. S. C. SC	HEDULE NO. 5	15th Revi	ised	SHEET NO	68
CANCELLING MO. P.S.C. SC	HEDULE NO. 5	14th Revi	ised	SHEET NO	68
PPLYING TO	MISSOURI S	SERVICE AREA			
		SSION SERVICE RATE			
* Rate Based on Monthl	y Meter Readin	gs			
		g four (4) monthly through September)	billing		
Customer Char	ge - per month		\$311.86		
Low-Income Pi	lot Program Cha	arge - per month	\$1,500.00		
Demand Charge	- per kW of B	illing Demand	\$15.37		
Energy Charge	- per kWh		2.918	¢	
Reactive Char	ge – per kVar		37.000	¢	
		g eight (8) monthly er through May)	billing		
Customer Char	ge - per month		\$311.86		
Low-Income Pi	lot Program Cha	arge - per month	\$1,500.00		
Demand Charge	- per kW of B	illing Demand	\$5.87		
Energy Charge	- per kWh		2.569	¢	
Reactive Char	ge – per kVar		37.000	¢	
Optional Time-of-	Day Adjustment	<u>s</u>			
Additional Cu	ustomer Charge	- per month	\$20.30		
Energy Adjust	tment - per kWh	1	On-Peak Hours(1)	Off-Pe Hours	
Summer kWh	(June-Septembe	er Billing Periods)	+0.68¢	-0.3	8¢
Winter kWh	(October-May H	Billing Periods)	+0.31¢	-0.1	б¢
		urs applicable here ervice classificati		e as	
Fuel and Purchased Pkilowatt-hours (kWh)		t (Rider FAC). Appl	icable to a	.ll mete:	red
* Indicates Change.					
DATE OF ISSUE Februar	ту 3, 2012	DATE EFFECTIVE	March 4	, 2012	

DATE OF ISSUE	repruary 3, 201	Z DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

	MO. P. S. C. SCHEDULE NO5	5th Revise	ed SHEET NO. 68.1
CANCELLI	NG MO. P.S.C. SCHEDULE NO. 5		ed SHEET NO. 68.1
APPLYING TO	MISSOURI SE	RVICE AREA	
	SERVICE CLASSIF	CATION NO. 12(M) ERVICE RATE (Cont'd	l <u>.)</u>
from use shall be transmiss	ne Loss Rate. Compensation of the transmission syst in the form of energy ion owner(s) and compensater kWh after appropriate R	em(s) outside Comp solely supplied t ted by payment at	pany's control area by Company to the a monthly rate of
	Transmission Service Requered provide service under this approval from the appropri ("RTO") to incorporate Custing Integration Transmission obligation or requirement improve any existing or new	rate is condition ate Regional Transm tomer's load withi Service agreem that Company cons	ned upon receipt of dission Organization on Company's Network dent without the struct, upgrade, or
* Indicates	Change.		
DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012

| ISSUED BY | Warner L. Baxter | President & CEO | St. Louis, Missouri | NAME OF OFFICER | TITLE | ADDRESS

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.1
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.1

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE

Applicable To Service Provided On The Effective Date Of This Tariff And Thereafter

APPLICABILITY

This rider is applicable to kilowatt-hours (kWh) of energy supplied to customers served by the Company under Service Classification Nos. 1(M), 2(M), 3(M), 4(M), 5(M), 6(M), 7(M), 11(M), and 12(M).

Costs passed through this Fuel and Purchased Power Adjustment Clause (FAC) reflect differences between actual fuel and purchased power costs, including transportation, net of Off-System Sales Revenues (OSSR) (i.e., Actual Net Fuel Costs) and Net Base Fuel Costs (factor NBFC, as defined below), calculated and recovered as provided for herein.

The Accumulation Periods and Recovery Periods are as set forth in the following table:

Accumulation Period (AP)	<u> Filing Date</u>	Recovery Period (RP)
February through May	By August 1	October through May
June through September	By December 1	February through September
October through January	By April 1	June through January

Accumulation Period (AP) means the historical calendar months during which fuel and purchased power costs, including transportation, net of OSSR for all kWh of energy supplied to Missouri retail customers are determined.

Recovery Period (RP) means the billing months as set forth in the above table during which the difference between the Actual Net Fuel Costs during an Accumulation Period and NBFC are applied to and recovered through retail customer billings on a per kWh basis, as adjusted for service voltage level.

The Company will make a Fuel and Purchased Power Adjustment (FPA) filing by each Filing Date. The new FPA rates for which the filing is made will be applicable starting with the Recovery Period that begins following the Filing Date. All FPA filings shall be accompanied by detailed workpapers supporting the filing in an electronic format with all formulas intact.

FPA DETERMINATION

Ninety five percent (95%) of the difference between Actual Net Fuel Costs and NBFC for all kWh of energy supplied to Missouri retail customers during the respective Accumulation Periods shall be reflected as an FPA_C credit or debit, stated as a separate line item on the customer's bill and will be calculated according to the following formulas.

For the FPA filing made by each Filing Date, the FPA_C rate, applicable starting with the Recovery Period following the applicable Filing Date, to recover fuel and purchased power costs, including transportation, net of OSSR, to the extent they vary from Net Base Fuel Costs (NBFC), as defined below, during the recently-completed Accumulation Period is calculated as:

DATE OF ISSUE	February 3,	2012 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	<u> St. Louis, Missouri</u>
	NAME OF OFFICER	TITLE	ADDRESS

MO.P.S.C. SCHEDULE NO. 5 2nd Revised SHEET NO. 98.2

CANCELLING MO.P.S.C. SCHEDULE NO. 5 1st Revised SHEET NO. 98.2

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)
Applicable To Service Provided On The Effective Date Of This Tariff And Thereafter

** $FPA_{(RP)} = [[(CF+CPP-OSSR) - (NBFC \times S_{AP})] \times 95\% + I + R - N]/S_{RP}$

The FPA rate, which will be multiplied by the voltage level adjustment factors set forth below, applicable starting with the following Recovery Period is calculated as:

 $FPA_C = FPA_{(RP)} + FPA_{(RP-1)} + FPA_{(RP-2)}$

Effective with the Company's April 1, 2012 filing, $\mbox{FPA}_{\mbox{\scriptsize C}}$ shall be revised to:

 $FPA_C = FPA_{(RP)} + FPA_{(RP-1)}$

where:

 ${\rm FPA_C}$ = Fuel and Purchased Power Adjustment rate applicable starting with the Recovery Period following the applicable Filing Date.

 ${\rm FPA_{RP}}$ = FPA Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended prior to the applicable Filing Date.

 $\label{eq:FPA} \texttt{FPA}_{(\texttt{RP-1})} = \texttt{FPA} \ \texttt{Recovery} \ \texttt{Period} \ \texttt{rate} \ \texttt{component} \ \texttt{from} \ \texttt{prior} \ \texttt{FPA}_{\texttt{RP}} \\ \texttt{calculation, if any.}$

 $\text{FPA}_{(\text{RP}-2)} = \text{FPA Recovery Period rate component from FPA}_{\text{RP}}$ calculation prior to $\text{FPA}_{(\text{RP}-1)}$, if any.

CF = Fuel costs incurred to support sales to all retail customers and Off-System Sales allocated to Missouri retail electric operations, including transportation, associated with the Company's generating plants. These costs consist of the following:

- a) For fossil fuel or hydroelectric plants:
 - (i) the following costs reflected in Federal Energy Regulatory Commission (FERC) Account Number 501: coal commodity, applicable taxes, gas, alternative fuels, fuel additives, Btu adjustments assessed by coal suppliers, quality adjustments related to the sulfur content of coal assessed by coal suppliers, railroad transportation, switching and demurrage charges, railcar repair and inspection costs, railcar depreciation, railcar lease costs, similar costs associated with other applicable modes of transportation, fuel hedging costs (for purposes of factor CF, hedging is defined as realized losses and costs minus realized gains associated with mitigating volatility in the Company's cost of fuel and purchased power, including but not limited to, the Company's use of futures, options and over-the-counter derivatives

** Indicates Change.

DATE OF ISSUE February 3, 2012 DATE EFFECTIVE March 4, 2012

ISSUED BY Warner L. Baxter President & CEO St. Louis, Missouri

NAME OF OFFICER

DIDED EAG							
APPLYING TO	OMIS	SOURI	SERVICE	AREA			
	CANCELLING MO.P.S.C. SCHEDULE NO.	5		1st	Revised	SHEET NO.	98.3
	MO.P.S.C. SCHEDULE NO.	5		2nd	Revised	SHEET NO.	98.3

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)
Applicable To Service Provided On The Effective Date Of This Tariff And Thereafter

including, without limitation, futures contracts, puts, calls, caps, floors, collars, and swaps), hedging costs associated with SO2 and fuel oil adjustments included in commodity and transportation costs, broker commissions and fees associated with price hedges, oil costs, ash disposal revenues and expenses, and revenues and expenses resulting from fuel and transportation portfolio optimization activities; and

- * (ii) the following costs reflected in FERC Account Number 502: consumable costs related to Air Quality Control System (AQCS) operation, such as urea, limestone and powder activated carbon; and
 - (iii) the following costs reflected in FERC Account Number 547: natural gas generation costs related to commodity, oil, transportation, storage, capacity reservation charges, fuel losses, hedging costs, and revenues and expenses resulting from fuel and transportation portfolio optimization activities; and
 - (iv) costs and revenues for SO_2 and NO_{x} emission allowances.
- b) Costs in FERC Account Number 518 (Nuclear Fuel Expense).
- = Costs of purchased power reflected in FERC Account Numbers CPP 555, 565, and 575, excluding MISO administrative fees arising under MISO Schedules 10, 16, 17, and 24, and excluding capacity charges for contracts with terms in excess of one (1) year, incurred to support sales to all Missouri retail customers and Off-System Sales allocated to Missouri retail electric operations. Also included in factor "CPP" are insurance premiums in FERC Account Number 924 for replacement power insurance to the extent those premiums are not reflected in base rates. Changes in replacement power insurance premiums from the level reflected in base rates shall increase or decrease purchased power costs. Additionally, costs of purchased power will be reduced by expected replacement power insurance recoveries qualifying as assets under Generally Accepted Accounting Principles.
- OSSR = All revenues in FERC Account 447.
- * Indicates Addition.

DATE OF ISSUE	February 3,	2012 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St Louis Missouri

ADDRESS

	MO.P.S.C. SCHEDULE NO. 5	2nd Revised	SHEET NO. 98.4
CANCEL	LING MO.P.S.C. SCHEDULE NO. 5	1st Revised	SHEET NO. 98.4
APPLYING TO	MISSOURI SERVI	CE AREA	
Applicable	RIDER F FUEL AND PURCHASED POWER ADJU TO Service Provided On The Effec	USTMENT CLAUSE (CONT'	
*:	*Adjustment For Reduction of Son Determinants: Should the level of monthly be Classification 12(M) fall below monthly billing determinants of 0166 an adjustment to OSSR should be shown adjustment will be shown adjustment will be shown adjustment will be shown adjustment of 40,000,000 - All Off-System Sales respectively.	illing determinants un ow the level of normal as established in Case all be made in accorda 40,000,000 kWh in a gi made to OSSR.	nder Service lized 12(M) e No. ER-2012- ance with the lven month
** N	energy sold off-system be excluded from OSSR. = The positive amount by which Accumulation Period, (a) re sale of power made possible level of 12(M) sales (as accumulation) exceeds (b) the reduction normalized 12(M) revenue 2012-0166.	ch, over the course of evenues derived from the e as a result of reduced ddressed in the definition	duction shall f the the off-system ctions in the ition of OSSR ues compared
** I	= Interest applicable to (i) Fuel Costs and NBFC for all Missouri retail customers of those costs have been recor reviews (a portion of factor or over-recovery balances of FAC, as determined in the (a portion of factor R, be) monthly at a rate equal to paid on the Company's short end balance of items (i) the sentence.	Il kWh of energy suppoduring an Accumulation vered; (ii) refunds do or R, below); and (ii) created through operatorue-up filings proviouslow). Interest shall the weighted average t-term debt, applied to	lied to n Period until ue to prudence i) all under- tion of this ded for herein be calculated interest rate to the month-
** Indicat	es Change.		

DATE OF ISSUE February 3, 2012 DATE EFFECTIVE March 4, 2012 ISSUED BY <u>Warner L. Baxter</u>
NAME OF OFFICER President & CEO TITLE St. Louis, Missouri
ADDRESS

APPLYING TO MISSOURI SERVICE AREA RIDER FAC FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.) Applicable To Service Provided On The Effective Date of This Tariff And Thereafte R = Under/over recovery (if any) from currently active and prior Recovery Periods as determined for the FAC true-up adjustments, and modifications due to adjustments ordered by the Commission, as a result of required prudence reviews or other disallowances and reconciliations, with interest as defined in item I. Sap = kWh during the Accumulation Period that ended prior to the applicable Filing Date, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above. Sap = Applicable Recovery Period estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARE to be billed. ***NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CFP), plus cost of purchased power (consistent with the term CFP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
RIDER FAC FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.) Applicable To Service Provided On The Effective Date Of This Tariff And Thereafte R = Under/over recovery (if any) from currently active and prior Recovery Periods as determined for the FAC true-up adjustments, and modifications due to adjustments ordered by the Commission, as a result of required prudence reviews or other disallowances and reconciliations, with interest as defined in item I. SAP = kWh during the Accumulation Period that ended prior to the applicable Filing Date, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above. SRP = Applicable Recovery Period estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARP to be billed. **NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CFP), plus cost of purchased power (consistent with the term CFP), less revenues from off-system sales (consistent with the term CSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
Applicable To Service Provided On The Effective Date Of This Tariff And Thereafte R = Under/over recovery (if any) from currently active and prior Recovery Periods as determined for the FAC true-up adjustments, and modifications due to adjustments ordered by the Commission, as a result of required prudence reviews or other disallowances and reconciliations, with interest as defined in item I. Sap = kWh during the Accumulation Period that ended prior to the applicable Filing Date, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above. Sap = Applicable Recovery Period estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARP to be billed. **NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CFP), plus cost of purchased power (consistent with the term CFP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
Recovery Periods as determined for the FAC true-up adjustments, and modifications due to adjustments ordered by the Commission, as a result of required prudence reviews or other disallowances and reconciliations, with interest as defined in item I. Sap = kWh during the Accumulation Period that ended prior to the applicable Filing Date, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above. Sap = Applicable Recovery Period estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARP to be billed. **NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CF), plus cost of purchased power (consistent with the term CPP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
applicable Filing Date, as measured by taking the retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above. SRP = Applicable Recovery Period estimated kWh representing the expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARP to be billed. **NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CF), plus cost of purchased power (consistent with the term CPP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
expected retail component of the Company's load settled at its MISO CP node (AMMO.UE or successor node), subject to the FPARP to be billed. **NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CF), plus cost of purchased power (consistent with the term CPP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
Commission's order as the normalized test year value for the sum of allowable fuel costs (consistent with the term CF), plus cost of purchased power (consistent with the term CPP), less revenues from off-system sales (consistent with the term OSSR), expressed in cents per kWh, based on the retail kWh from the net output calculation in the fuel run used in part to determine Net Base Fuel Costs, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.529 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.553 cents per kWh.
**To determine the FPA rates applicable to the individual Service Classifications, the ${\rm FPA_C}$ rate determined in accordance with the foregoing will be multiplied by the following voltage level adjustment factors:
Secondary Voltage Service 1.0575 Primary Voltage Service 1.0252 Large Transmission Voltage Service 0.9917
The FPA rates applicable to the individual Service Classifications shall be rounded to the nearest 0.001 cents, to be charged on a cents/kWh basis for each applicable kWh billed.
** Indicates Change.

DATE OF ISSUE February 3, 2012 DATE EFFECTIVE March 4, 2012

ISSUED BY Warner L. Baxter President & CEO St. Louis, Missouri

NAME OF OFFICER TITLE ADDRESS

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.6
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.6

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)
Applicable To Service Provided On The Effective Date Of This Tariff And Thereafter

TRUE-UP OF FAC

After completion of each Recovery Period, the Company will make a true-up filing in conjunction with an adjustment to its FAC. The true-up filing shall be made on the same day as the filing made to adjust its FAC. Any true-up adjustments or refunds shall be reflected in item R above, and shall include interest calculated as provided for in item I above.

The true-up adjustments shall be the difference between the revenues billed and the revenues authorized for collection during the Recovery Period.

GENERAL RATE CASE/PRUDENCE REVIEWS

NAME OF OFFICER

The following shall apply to this Fuel and Purchased Power Adjustment Clause, in accordance with Section 386.266.4, RSMo. and applicable Missouri Public Service Commission Rules governing rate adjustment mechanisms established under Section 386.266, RSMo:

The Company shall file a general rate case with the effective date of new rates to be no later than four years after the effective date of a Missouri Public Service Commission order implementing or continuing this Fuel and Purchased Power Adjustment Clause. The four-year period referenced above shall not include any periods in which the Company is prohibited from collecting any charges under this Fuel and Purchased Power Adjustment Clause, or any period for which charges hereunder must be fully refunded. In the event a court determines that this Fuel and Purchased Power Adjustment Clause is unlawful and all moneys collected hereunder are fully refunded, the Company shall be relieved of the obligation under this Fuel and Purchased Power Adjustment Clause to file such a rate case.

Prudence reviews of the costs subject to this Fuel and Purchased Power Adjustment Clause shall occur no less frequently than every eighteen months, and any such costs which are determined by the Missouri Public Service Commission to have been imprudently incurred or incurred in violation of the terms of this rider shall be returned to customers with interest at a rate equal to the weighted average interest rate paid on the Company's short-term debt.

DATE OF ISSUE	February 3, 2	DATE EFFECTIVE	March 4,	2012
ISSUED BY	Warner I. Bayter	Dresident & CEO	St Iouis	Miggouri

TITI F

ADDRESS

MO.P.S.C. SCHEDULE NO.	5	2nd Revised SHEET NO	98.8
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised SHEET NO.	98.8

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE

**(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

APPLICABILITY

This rider is applicable to kilowatt-hours (kWh) of energy supplied to customers served by the Company under Service Classification Nos. 1(M), 2(M), 3(M), 4(M), 5(M), 6(M), 7(M), 8(M), 11(M), and 12(M).

Costs passed through this Fuel and Purchased Power Adjustment Clause (FAC) reflect differences between actual fuel and purchased power costs, including transportation, net of Off-System Sales Revenues (OSSR) (i.e., Actual Net Fuel Costs) and Net Base Fuel Costs (factor NBFC, as defined below), calculated and recovered as provided for herein.

The Accumulation Periods and Recovery Periods are as set forth in the following table:

Accumulation Period (AP)	Filing Date	Recovery Period (RP)
February through May	By August 1	October through September
June through September	By December 1	February through January
October through January	By April 1	June through May

Accumulation Period (AP) means the historical calendar months during which fuel and purchased power costs, including transportation, net of OSSR for all kWh of energy supplied to Missouri retail customers are determined.

Recovery Period (RP) means the billing months as set forth in the above table during which the difference between the Actual Net Fuel Costs during an Accumulation Period and NBFC are applied to and recovered through retail customer billings on a per kWh basis, as adjusted for service voltage level.

The Company will make a Fuel and Purchased Power Adjustment (FPA) filing by each Filing Date. The new FPA rates for which the filing is made will be applicable starting with the Recovery Period that begins following the Filing Date. All FPA filings shall be accompanied by detailed workpapers supporting the filing in an electronic format with all formulas intact.

FPA DETERMINATION

Ninety five percent (95%) of the difference between Actual Net Fuel Costs and NBFC for all kWh of energy supplied to Missouri retail customers during the respective Accumulation Periods shall be reflected as an FPA_C credit or debit, stated as a separate line item on the customer's bill and will be calculated according to the following formulas.

For the FPA filing made by each Filing Date, the FPA_C rate, applicable starting with the Recovery Period following the applicable Filing Date, to recover fuel and purchased power costs, including transportation, net of OSSR, to the extent they vary from Net Base Fuel Costs (NBFC), as defined below, during the recently-completed Accumulation Period is calculated as:

DATE OF ISSUE	February 3, 2	012 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
· · · · · · · · · · · · · · · · · · ·	NAME OF OFFICER	TITI C	ADDDECC

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.9
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.9

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D) **(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

$$FPA_{(RP)} = [[(CF+CPP-OSSR-TS-S-W) - (NBFC \times S_{AP})] \times 95\% + I + R - N]/S_{RP}$$

The FPA rate, which will be multiplied by the voltage level adjustment factors set forth below, applicable starting with the following Recovery Period is calculated as:

$$FPA_C = FPA_{(RP)} + FPA_{(RP-1)} + FPA_{(RP-2)}$$

where:

 ${\rm FPA_C}$ = Fuel and Purchased Power Adjustment rate applicable starting with the Recovery Period following the applicable Filing

 ${\rm FPA_{RP}}$ = FPA Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended prior to the applicable Filing Date.

 $\text{FPA}_{(\text{RP-1})} = \text{FPA Recovery Period rate component from prior } \text{FPA}_{\text{RP}}$ calculation, if any.

 $FPA_{(RP-2)} = FPA$ Recovery Period rate component from FPA_{RP} calculation prior to $FPA_{(RP-1)}$, if any.

CF = Fuel costs incurred to support sales to all retail customers and Off-System Sales allocated to Missouri retail electric operations, including transportation, associated with the Company's generating plants. These costs consist of the following:

- a) For fossil fuel or hydroelectric plants:
 - the following costs reflected in Federal Energy Regulatory Commission (FERC) Account Number 501: coal commodity, applicable taxes, gas, alternative fuels, fuel additives, Btu adjustments assessed by coal suppliers, quality adjustments related to the sulfur content of coal assessed by coal suppliers, costs and revenues for SO_2 and NO_x emission allowances, railroad transportation, switching and demurrage charges, railcar repair and inspection costs, railcar depreciation, railcar lease costs, similar costs associated with other applicable modes of transportation, fuel hedging costs (for purposes of factor CF, hedging is defined as realized losses and costs minus realized gains associated with mitigating volatility in the Company's cost of fuel and purchased power, including but not limited to, the Company's use of futures, options and over-the-counter derivatives including, without limitation, futures contracts, puts, calls, caps, floors, collars, and swaps), hedging costs associated with SO2 and fuel oil

** Indicates Change.

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ISSUED BV	Warner I. Bayter	President & CEO	St Louis Missouri

NAME OF OFFICER TITLE

ADDRESS

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.10
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.10

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D)

**(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

adjustments included in commodity and transportation costs, broker commissions and fees associated with price hedges, oil costs, ash disposal revenues and expenses, and revenues and expenses resulting from fuel and transportation portfolio optimization activities; and

- (ii) the following costs reflected in FERC Account Number 547: natural gas generation costs related to commodity, oil, transportation, storage, capacity reservation charges, fuel losses, hedging costs, and revenues and expenses resulting from fuel and transportation portfolio optimization activities;
- b) Costs in FERC Account Number 518 (Nuclear Fuel Expense).
- = Costs of purchased power reflected in FERC Account Numbers CPP 555, 565, and 575, excluding MISO administrative fees arising under MISO Schedules 10, 16, 17, and 24, and excluding capacity charges for contracts with terms in excess of one (1) year, incurred to support sales to all Missouri retail customers and Off-System Sales allocated to Missouri retail electric operations. Also included in factor "CPP" are insurance premiums in FERC Account Number 924 for replacement power insurance (other than relating to the Taum Sauk Plant) to the extent those premiums are not reflected in base rates. Changes in replacement power insurance premiums (other than those relating to the Taum Sauk Plant) from the level reflected in base rates shall increase or decrease purchased power costs. Additionally, costs of purchased power will be reduced by expected replacement power insurance recoveries (other than those relating to the Taum Sauk Plant) qualifying as assets under Generally Accepted Accounting Principles. Notwithstanding the foregoing, concurrently with the date the "TS" factor is eliminated as provided for in this tariff, the premiums and recoveries relating to replacement power insurance coverage for the Taum Sauk Plant shall be included in this CPP Factor.
- OSSR = Revenues from Off-System Sales allocated to Missouri electric operations.

Off-System Sales shall include all sales transactions (including MISO revenues in FERC Account Number 447), excluding Missouri retail sales and long-term full and partial requirements sales to Missouri municipalities, that are associated with (1) AmerenUE Missouri jurisdictional generating units, (2) power purchases made to serve Missouri retail load, and (3) any related transmission.

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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.11
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.11

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D)

**(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

Adjustment For Reduction of Service Classification 12(M) Billing Determinants:

Should the level of monthly billing determinants under Service Classification 12(M) fall below the level of normalized 12(M) monthly billing determinants as established in Case No. ER-2010-0036 an adjustment to OSSR shall be made in accordance with the following levels:

- a) A reduction of less than 40,000,000 kWh in a given monthNo adjustment will be made to OSSR.
- b) A reduction of 40,000,000 kWh or greater in a given month - All Off-System revenues derived from all kWh of energy sold off-system due to the entire reduction shall be excluded from OSSR.
- TS = The Accumulation Period value of Taum Sauk. This factor will be used to reduce actual fuel costs to reflect the value of Taum Sauk, and will be credited in FPA filings (of which there are three each year as shown in the table above), until the next rate case or, if sooner, until Taum Sauk is placed back in service. This value is \$26.8 million annually, one third of which (i.e., \$8.93 million) will be applied to each Accumulation Period.
- S = The Accumulation Period value of Blackbox Settlement Amount of \$3 million annually, which shall expire on September 1, 2010. One third of the annual value (\$1 million) shall be applied to each Accumulation Period. For the Accumulation Period during which the factor expires, the factor shall be prorated according to the number of days during which it was effective during that Accumulation Period.
- W = \$300,000 per month for the months, July 1, 2010 through, June 30, 2011. This factor "W" expires on June 30, 2011.
- N = The positive amount by which, over the course of the Accumulation Period, (a) revenues derived from the off-system sale of power made possible as a result of reductions in the level of 12(M) sales (as addressed in the definition of OSSR above) exceeds (b) the reduction of 12(M) revenues compared to normalized 12(M) revenues as determined in Case No. ER-2010-0036.
- I = Interest applicable to (i) the difference between Actual Net
 Fuel Costs (adjusted for Taum Sauk, factor "S", and factor
 "W") and NBFC for all kWh of energy supplied to Missouri
 retail customers during an Accumulation Period until those
 costs have been recovered; (ii) refunds due to prudence
 reviews (a portion of factor R, below); and (iii) all underor over-recovery
- ** Indicates Change.

NAME OF OFFICER

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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri

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		 	Revised	SHEET NO.	90.12
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1at	Revised	SHEET NO.	98 12
MO.P.S.C. SCHEDULE NO.	5	2nd	Revised	SHEET NO.	98.12
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RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D)

**(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

balances created through operation of this FAC, as determined in the true-up filings provided for herein (a portion of factor R, below). Interest shall be calculated monthly at a rate equal to the weighted average interest rate paid on the Company's short-term debt, applied to the month-end balance of items (i) through (iii) in the preceding sentence.

- R = Under/over recovery (if any) from currently active and prior Recovery Periods as determined for the FAC true-up adjustments, and modifications due to adjustments ordered by the Commission (other than the adjustment for Taum Sauk as already reflected in the TS factor), as a result of required prudence reviews or other disallowances and reconciliations, with interest as defined in item I.
- S_{AP} = Supplied kWh during the Accumulation Period that ended prior to the applicable Filing Date, at the generation level, plus the kWh reductions up to the kWh of energy sold off-system associated with the 12(M) OSSR adjustment above.
- S_{RP} = Applicable Recovery Period estimated kWh, at the generation level, subject to the FPARP to be billed.
- NBFC = Net Base Fuel Costs are the net costs determined by the Commission's order as the normalized test year value (and reflecting an adjustment for Taum Sauk, consistent with the term TS) for the sum of allowable fuel costs (consistent with the term CF), plus cost of purchased power (consistent with the term CPP), less revenues from off-system sales (consistent with the term OSSR), less adjustments (consistent with the terms "S" and "W"), expressed in cents per kWh, at the generation level, as included in the Company's retail rates. The NBFC rate applicable to June through September calendar months ("Summer NBFC Rate") is 1.236 cents per kWh. The NBFC rate applicable to October through May calendar months ("Winter NBFC Rate") is 1.044 cents per kWh.

To determine the FPA rates applicable to the individual Service Classifications, the FPA_{C} rate determined in accordance with the foregoing will be multiplied by the following voltage level adjustment factors:

Secondary Voltage Service	1.0789
Primary Voltage Service	1.0459
Large Transmission Voltage Service	1.0124

The FPA rates applicable to the individual Service Classifications shall be rounded to the nearest 0.001 cents, to be charged on a cents/kWh basis for each applicable kWh billed.

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<u></u>	NAME OF OFFICER	TITI F	ADDRESS

MO.P.S.C. SCHEDULE NO.	5	2nd Revised	SHEET NO.	98.13
CANCELLING MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.13

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D)

**(Applicable To Service Provided Between June 21, 2010 And July 30, 2011)

TRUE-UP OF FAC

After completion of each Recovery Period, the Company will make a true-up filing in conjunction with an adjustment to its FAC, where applicable. The true-up filings shall be made on the first Filing Date that occurs at least two (2) months after completion of each Recovery Period. Any true-up adjustments or refunds shall be reflected in item R above, and shall include interest calculated as provided for in item I above.

The true-up adjustments shall be the difference between the revenues billed and the revenues authorized for collection during the Recovery Period.

GENERAL RATE CASE/PRUDENCE REVIEWS

The following shall apply to this Fuel and Purchased Power Adjustment Clause, in accordance with Section 386.266.4, RSMo. and applicable Missouri Public Service Commission Rules governing rate adjustment mechanisms established under Section 386.266, RSMo:

The Company shall file a general rate case with the effective date of new rates to be no later than four years after the effective date of a Missouri Public Service Commission order implementing or continuing this Fuel and Purchased Power Adjustment Clause. The four-year period referenced above shall not include any periods in which the Company is prohibited from collecting any charges under this Fuel and Purchased Power Adjustment Clause, or any period for which charges hereunder must be fully refunded. In the event a court determines that this Fuel and Purchased Power Adjustment Clause is unlawful and all moneys collected hereunder are fully refunded, the Company shall be relieved of the obligation under this Fuel and Purchased Power Adjustment Clause to file such a rate case.

Prudence reviews of the costs subject to this Fuel and Purchased Power Adjustment Clause shall occur no less frequently than every eighteen months, and any such costs which are determined by the Missouri Public Service Commission to have been imprudently incurred shall be returned to customers with interest at a rate equal to the weighted average interest rate paid on the Company's short-term debt.

** Indicates	Change.		

DATE OF ISSUE	<u> </u>	2012 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.15
CANCELLING MO.P.S.C. SCHEDULE NO.	5	Original	SHEET NO.	98.15

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE

**(Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff)

APPLICABILITY

This rider is applicable to kilowatt-hours (kWh) of energy supplied to customers served by the Company under Service Classification Nos. 1(M), 2(M), 3(M), 4(M), 5(M), 6(M), 7(M), 11(M), and 12(M).

Costs passed through this Fuel and Purchased Power Adjustment Clause (FAC) reflect differences between actual fuel and purchased power costs, including transportation, net of Off-System Sales Revenues (OSSR) (i.e., Actual Net Fuel Costs) and Net Base Fuel Costs (factor NBFC, as defined below), calculated and recovered as provided for herein.

The Accumulation Periods and Recovery Periods are as set forth in the following table:

Accumulation Period (AP)	Filing Date	Recovery Period (RP)
February through May	By August 1	October through May
June through September	By December 1	February through September
October through January	By April 1	June through January

Accumulation Period (AP) means the historical calendar months during which fuel and purchased power costs, including transportation, net of OSSR for all kWh of energy supplied to Missouri retail customers are determined.

Recovery Period (RP) means the billing months as set forth in the above table during which the difference between the Actual Net Fuel Costs during an Accumulation Period and NBFC are applied to and recovered through retail customer billings on a per kWh basis, as adjusted for service voltage level.

The Company will make a Fuel and Purchased Power Adjustment (FPA) filing by each Filing Date. The new FPA rates for which the filing is made will be applicable starting with the Recovery Period that begins following the Filing Date. All FPA filings shall be accompanied by detailed workpapers supporting the filing in an electronic format with all formulas intact.

FPA DETERMINATION

Ninety five percent (95%) of the difference between Actual Net Fuel Costs and NBFC for all kWh of energy supplied to Missouri retail customers during the respective Accumulation Periods shall be reflected as an FPA_C credit or debit, stated as a separate line item on the customer's bill and will be calculated according to the following formulas.

For the FPA filing made by each Filing Date, the FPA_c rate, applicable starting with the Recovery Period following the applicable Filing Date, to recover fuel and purchased power costs, including transportation, net of OSSR, to the extent they vary from Net Base Fuel Costs (NBFC), as defined below, during the recently-completed Accumulation Period is calculated as:

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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
·	NAME OF OFFICER	TITI F	ADDRESS

MO.P.S.C. SCHEDULE NO.	5	lst Revised	SHEET NO.	98.16
CANCELLING MO.P.S.C. SCHEDULE NO.	5	Original	SHEET NO.	98.16

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)

**(Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff)

$$FPA_{(RP)} = [[(CF+CPP-OSSR-W) - (NBFC \times S_{AP})]x 95\% + I + R - N]/S_{RP}$$

The FPA rate, which will be multiplied by the voltage level adjustment factors set forth below, applicable starting with the following Recovery Period is calculated as:

$$FPA_C = FPA_{(RP)} + FPA_{(RP-1)} + FPA_{(RP-2)}$$

Effective with the Company's April 1, 2012 filing, $\mbox{FPA}_{\mbox{\scriptsize C}}$ shall be revised to:

$$FPA_C = FPA_{(RP)} + FPA_{(RP-1)}$$

where:

 ${\sf FPA_C}$ = Fuel and Purchased Power Adjustment rate applicable starting with the Recovery Period following the applicable Filing Date.

 ${\rm FPA_{RP}}$ = FPA Recovery Period rate component calculated to recover under/over collection during the Accumulation Period that ended prior to the applicable Filing Date.

 $\text{FPA}_{(\text{RP-1})} = \text{FPA Recovery Period rate component from prior } \text{FPA}_{\text{RP}}$ calculation, if any.

 $\text{FPA}_{(\text{RP-2})} = \text{FPA Recovery Period rate component from } \text{FPA}_{\text{RP}} \text{ calculation}$ prior to $\text{FPA}_{(\text{RP-1})}$, if any.

CF = Fuel costs incurred to support sales to all retail customers and Off-System Sales allocated to Missouri retail electric operations, including transportation, associated with the Company's generating plants. These costs consist of the following:

a) For fossil fuel or hydroelectric plants:

(i) the following costs reflected in Federal Energy Regulatory Commission (FERC) Account Number 501: coal commodity, applicable taxes, gas, alternative fuels, fuel additives, Btu adjustments assessed by coal suppliers, quality adjustments related to the sulfur content of coal assessed by coal suppliers, railroad transportation, switching and demurrage charges, railcar repair and inspection costs, railcar depreciation, railcar lease costs, similar costs associated with other applicable modes of transportation, fuel hedging costs (for purposes of factor CF, hedging is defined as realized losses and costs minus realized gains associated with mitigating volatility in the Company's cost of fuel and purchased power, including but not limited to, the Company's use of futures, options and over-the-counter derivatives

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ISSUED BY	Warner L. Baxter	President & CEO	<u> St. Louis, Missouri</u>
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UNION ELECTRIC COMPANY ELECTRIC SE	RVICE	
MO.P.S.C. SCHEDULE NO5	1st Revised	SHEET NO. 98.17
CANCELLING MO.P.S.C. SCHEDULE NO5	Original	SHEET NO. 98.17
APPLYING TO MISSOURI SERV	CE AREA	
FUEL AND PURCHASED POWER ADD **(Applicable To Service Provided Between Effective Date On	JUSTMENT CLAUSE (CONT') n July 31, 2011 And The I	
calls, caps, floors, associated with SO2 in commodity and tracommissions and fees costs, ash disposal	limitation, futures con, collars, and swaps), and fuel oil adjustment ansportation costs, brown associated with price revenues and expenses ing from fuel and transition activities; and	hedging costs nts included oker e hedges, oil , and revenues
Number 547: natural commodity, oil, train reservation charges revenues and expense	costs reflected in FER l gas generation costs asportation, storage, of fuel losses, hedging es resulting from fuel folio optimization act	related to capacity costs, and and
(iii) costs and reve allowances;	enues for ${ m SO_2}$ and ${ m NO_x}$ em	nission
b) Costs in FERC Accour Expense).	nt Number 518 (Nuclear	Fuel
CPP = Costs of purchased power of 555, 565, and 575, exclude under MISO Schedules 10, 1	ing MISO administrative 16, 17, and 24, and exc	e fees arising cluding

CPP = Costs of purchased power reflected in FERC Account Numbers 555, 565, and 575, excluding MISO administrative fees arising under MISO Schedules 10, 16, 17, and 24, and excluding capacity charges for contracts with terms in excess of one (1) year, incurred to support sales to all Missouri retail customers and Off-System Sales allocated to Missouri retail electric operations. Also included in factor "CPP" are insurance premiums in FERC Account Number 924 for replacement power insurance to the extent those premiums are not reflected in base rates. Changes in replacement power insurance premiums from the level reflected in base rates shall increase or decrease purchased power costs. Additionally, costs of purchased power will be reduced by expected replacement power insurance recoveries qualifying as assets under Generally Accepted Accounting Principles.

OSSR = All revenues in FERC Account 447.

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ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTI	RIC COMPANY ELECTRIC SE	RVICE	
	MO.P.S.C. SCHEDULE NO. 5	1st Revised	SHEET NO. 98.18
CANCE	ELLING MO.P.S.C. SCHEDULE NO. 5	Original	SHEET NO. 98.18
APPLYING TO	MISSOURI SERV	ICE AREA	
**(Appl	RIDER FUEL AND PURCHASED POWER ADditable To Service Provided Betwee Effective Date O	JUSTMENT CLAUSE (CONT' n July 31, 2011 And The	
	Adjustment For Reduction of Determinants: Should the level of monthly Classification 12(M) fall be monthly billing determinants 0028 an adjustment to OSSR stollowing levels:	billing determinants u low the level of norma as established in Cas	under Service alized 12(M) se No. ER-2011-
	a) A reduction of less than - No adjustment will be		given month
	b) A reduction of 40,000,000 - All Off-System Sales energy sold off-syste be excluded from OSSR	revenues derived from em due to the entire r	all kWh of
W	= \$300,000 per month for the 30, 2011. This factor "W		
N	= The positive amount by who Accumulation Period, (a) sale of power made possible level of 12(M) sales (as above) exceeds (b) the recto normalized 12(M) revent 2011-0028.	revenues derived from le as a result of redu addressed in the defir duction of 12(M) rever	the off-system actions in the nition of OSSR nues compared
I	= Interest applicable to (i Fuel Costs (adjusted for energy supplied to Missour Accumulation Period until (ii) refunds due to pruder below); and (iii) all undereated through operation true-up filings provided below). Interest shall be to the weighted average in short-term debt, applied (i) through (iii) in the process of the state of the process of the state of the process of the state of the process of the	factor "W") and NBFC for i retail customers due those costs have been not reviews (a portioner or over-recovery to this FAC, as deter for herein (a portioner calculated monthly anterest rate paid on to the month-end balar	for all kWh of uring an recovered; n of factor R, calances rmined in the of factor R, at a rate equal the Company's

DATE OF ISSUE	February 3,	2012 DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC	COMPANY ELECTRIC SI	ERVICE	
	MO.P.S.C. SCHEDULE NO. 5	1st Revised	SHEET NO. 98.19
CANCELLING	MO.P.S.C. SCHEDULE NO5	Original	SHEET NO. 98.19
APPLYING TO	MISSOURI SERV	VICE AREA	
	RIDER UEL AND PURCHASED POWER AD THE TO Service Provided Between Effective Date (DJUSTMENT CLAUSE (CONT' en July 31, 2011 And The	
R =	Under/over recovery (if a Recovery Periods as deter adjustments, and modificathe Commission, as a resother disallowances and refined in item I.	rmined for the FAC true ations due to adjustmen sult of required pruden	e-up its ordered by ice reviews or
S _{AP} =	kWh during the Accumulating applicable Filing Date, a component of the Company' (AMMO.UE or successor not the kWh of energy sold of OSSR adjustment above.	as measured by taking to solve to the settled at its deltale, plus the kWh reduc	he retail MISO CP node tions up to
S _{RP} =	Applicable Recovery Periodexpected retail component its MISO CP node (AMMO.UE FPA_{RP} to be billed.	of the Company's load	l settled at
NBFC =	Net Base Fuel Costs are to Commission's order as the sum of allowable fuel cosplus cost of purchased poless revenues from off-sy OSSR), less an adjustment expressed in cents per kW net output calculation in determine Net Base Fuel Coretail rates. The NBFC retail rates acalendar months ("Winter Calendar months)	e normalized test year sts (consistent with the ower (consistent with the vestem sales (consistent with the III). It is the fuel run used in the fuel run used in the applicable to Junes ("Summer NBFC Rate") applicable to October to	value for the le term CF), the term CPP), with the term term "W"), kWh from the part to the Company's through is 1.319 cents through May
Classificatio	the FPA rates applicable ons, the FPA_c rate determiniplied by the following vo	ned in accordance with	the foregoing
Primary	ary Voltage Service / Voltage Service Transmission Voltage Servi	1.0557 1.0234 ce 0.9906	
rounded to th	s applicable to the indivi- ne nearest 0.001 cents, to ple kWh billed.		
**Indicates (Change.		

DATE OF ISSUE	February 3, 2012	DATE EFFECTIVE	March 4, 2012
ISSUED BY	Warner L. Baxter	President & CEO	St. Louis, Missouri
	NAME OF OFFICER	TITLE	ADDRESS

UNION ELECTRIC COMPANY ELECTRIC SERVICE

MO.P.S.C. SCHEDULE NO.	5	1st Revised	SHEET NO.	98.20
CANCELLING MO.P.S.C. SCHEDULE NO.	5	Original	SHEET NO.	98.20

APPLYING TO

MISSOURI SERVICE AREA

RIDER FAC

FUEL AND PURCHASED POWER ADJUSTMENT CLAUSE (CONT'D.)

**(Applicable To Service Provided Between July 31, 2011 And The Day Before The Effective Date Of This Tariff)

TRUE-UP OF FAC

After completion of each Recovery Period, the Company will make a true-up filing in conjunction with an adjustment to its FAC. The true-up filing shall be made on the same day as the filing made to adjust its FAC. Any true-up adjustments or refunds shall be reflected in item R above, and shall include interest calculated as provided for in item I above.

The true-up adjustments shall be the difference between the revenues billed and the revenues authorized for collection during the Recovery Period.

GENERAL RATE CASE/PRUDENCE REVIEWS

The following shall apply to this Fuel and Purchased Power Adjustment Clause, in accordance with Section 386.266.4, RSMo. and applicable Missouri Public Service Commission Rules governing rate adjustment mechanisms established under Section 386.266, RSMo:

The Company shall file a general rate case with the effective date of new rates to be no later than four years after the effective date of a Missouri Public Service Commission order implementing or continuing this Fuel and Purchased Power Adjustment Clause. The four-year period referenced above shall not include any periods in which the Company is prohibited from collecting any charges under this Fuel and Purchased Power Adjustment Clause, or any period for which charges hereunder must be fully refunded. In the event a court determines that this Fuel and Purchased Power Adjustment Clause is unlawful and all moneys collected hereunder are fully refunded, the Company shall be relieved of the obligation under this Fuel and Purchased Power Adjustment Clause to file such a rate case.

Prudence reviews of the costs subject to this Fuel and Purchased Power Adjustment Clause shall occur no less frequently than every eighteen months, and any such costs which are determined by the Missouri Public Service Commission to have been imprudently incurred or incurred in violation of the terms of this rider shall be returned to customers with interest at a rate equal to the weighted average interest rate paid on the Company's short-term debt.

**Indicates Change.

DATE OF ISSUE February 3, 2012 DATE EFFECTIVE March 4, 2012 President & CEO St. Louis, <u>Missouri</u> ISSUED BY <u>Warner L. Baxter</u>

TITI F

UNION ELECTRIC COMPANY

ELECTRIC SERVICE

	MO.P.S.C. SCHEDULE NO.	5	22nd Revised	SHEET NO. 99
CANCE	ELLING MO.P.S.C. SCHEDULE NO.	<u></u>	21st Revised	SHEET NO. 99
APPLYING TO	MISSO	OURI SERVICE ARE	A	
del Com	DISCOUNTS APPLICABLE BY CUSTOMER I re a Customer served ivery of power and enpany will allow discounts:	N LIEU OF COMPA under rate scl ergy at a delive	NY OWNERSHIP nedules 4(M) or ery voltage of 3	11 (M) takes
*1.	A monthly credit taking service at		billing demand	for customers
*2.	A monthly credit taking service at		billing demand	for customers
*Indicate	s Change.			
DATE OF ISSUE	February 3, 2012	DATE EFFE	CTIVE Marc	ch 4, 2012

ISSUED BY Warner L. Baxter President & CEO St. Louis, Missouri NAME OF OFFICER TITLE ADDRESS

Ameren Missouri CASE NO. ER-2012-0166 PRESENT AND PROPOSED CLASS REVENUE REQUIREMENTS (\$000's)

Customer Class	 Current Base Revenue	_	Proposed Base Revenue		Required Revenue djustment		% Change
Residential	\$ 1,170,105	,	\$ 1,340,393	\$	170,288		14.6%
Small General Service	\$ 288,054	;	\$ 329,979	\$	41,925		14.6%
Large General Service	\$ 539,384	,	\$ 617,889	\$	78,505		14.6%
Small Primary Service	\$ 210,466	,	\$ 241,113	\$	30,647		14.6%
Large Primary Service	\$ 189,820	,	\$ 217,450	\$	27,629		14.6%
Large Transmission Service	\$ 147,949	;	\$ 169,485	\$	21,536		14.6%
Lighting	\$ 34,380	:	\$ 39,383	<u>\$</u>	5,003		<u>14.6%</u>
Total	\$ 2,580,158	;	\$ 2,955,691	\$	375,533	(1)	14.6%

^{(1) -} Targeted increase from Company witness Mr. Gary Weiss testimony is \$375,565; however, rate rounding resulted in a shortfall of approximately \$32K.

MISSOURI RESIDENTIAL SERVICE CLASSIFICATION NO. 1(M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES

	AVERAGE
kWh	MONTHLY BILL
100	\$21.57 \$26.35
200	\$31.12
250	\$35.89
300	\$40.66
350	\$45.43
400	\$50.20
450	\$54.98
500	\$59.75
550	\$64.52
600	\$69.29
650	\$74.06
700	\$78.83
750	\$83.61
800	\$87.48
850	\$91.34
900	\$95.21
950	\$99.08
1000	\$102.95
1100	\$110.69
1200	\$118.42
1300	\$126.16
1400	\$133.90
1500	\$141.63
1600	\$149.37
1700	\$157.11
1800	\$164.84
1900	\$172.58
2000	\$180.32
2500	\$219.00
3000	\$257.68
3500	\$296.37
4000	\$335.05
4500	\$373.73
5000	\$412.42

MISSOURI

SMALL GENERAL SERVICE CLASSIFICATION NO. 2(M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES SINGLE-PHASE SERVICE

AVERAGE

	AVERAGE
kWh	MONTHLY BILL
0	\$14.66
50	\$19.15
100	\$23.65
	· ·
300	\$41.62
400	\$50.61
500	\$59.59
300	209.09
600	\$68.58
700	
	\$77.57
800	\$86.55
900	\$95.54
1000	\$104.53
2,000	\$194.39
3,000	\$284.26
4,000	\$374.13
5,000	\$463.99
3,000	¥103.33
6,000	\$553.86
7,000	\$643.73
	•
8,000	\$733.59
9,000	\$823.46
10,000	\$913.33
10,000	\$313.33
11,000	\$1,003.19
12,000	\$1,093.06
13,000	\$1,182.93
14,000	\$1,272.79
•	
15,000	\$1,362.66
16,000	\$1,452.53
	• •
17,000	\$1,542.39
18,000	\$1,632.26
19,000	\$1,722.13
•	• •
20,000	\$1,811.99
21,000	\$1,901.86
22,000	\$1,991.73
23,000	\$2,081.59
24,000	\$2,171.46
•	
25,000	\$2,261.33
30,000	\$2,710.66
35,000	\$3,159.99
40,000	\$3,609.33
	• •
45,000	\$4,058.66
50,000	\$4,507.99

(1) - WINTER BILLS EXCLUDE SEASONAL USAGE EFFECT, IF ANY.

MISSOURI SMALL GENERAL SERVICE CLASSIFICATION NO. 2(M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES THREE-PHASE SERVICE

THREE-PHASE	AVERAGE
	MONTHLY
kWh	BILL
0	\$29.29
50	\$33.78
100	\$38.28
300	\$56.25
400	\$65.24
500	\$74.22
600	\$83.21
700	\$92.20
800	\$101.18
900 1000	\$110.17 \$119.16
1000	7117.10
2,000	\$209.02
3,000	\$298.89
4,000	\$388.76
5,000	\$478.62
6,000	\$568.49
7,000	\$658.36
8,000	\$748.22
9,000 10,000	\$838.09 \$927.96
10,000	\$327.30
11,000	\$1,017.82
12,000	\$1,107.69
13,000 14,000	\$1,197.56 \$1,287.42
15,000	\$1,377.29
16,000	\$1,467.16
17,000	\$1,557.02
18,000	\$1,646.89 \$1,736.76
19,000 20,000	\$1,736.76
20,000	φ1,020.02
21,000	\$1,916.49
22,000	\$2,006.36
23,000 24,000	\$2,096.22 \$2,186.09
25,000	\$2,186.09
·	
30,000	\$2,725.29
35,000 40,000	\$3,174.62 \$3,623.96
45,000	\$4,073.29
50,000	\$4,522.62
, -	, ,

(1) - WINTER BILLS EXCLUDE SEASONAL USAGE EFFECT, IF ANY.

MISSOURI LARGE GENERAL SERVICE CLASSIFICATION NO. 3 (M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES

			AVERAGE
kW	kWh/kW	kWh	MONTHLY BILL
100	100	10,000	\$1,178.17
100	200	20,000	\$1,884.34
	300	30,000	\$2,491.67
	400	40,000	\$3,021.84
		50,000	\$3,021.84
	500	·	
	600	60,000	\$3,927.84
	700	70,000	\$4,380.84
500	100	50,000	\$5,519.51
	200	100,000	\$9,050.34
	300	150,000	\$12,087.01
	400	200,000	\$14,737.84
	500	250,000	\$17,002.84
	600	300,000	\$19,267.84
	700	350,000	\$21,532.84
1000	100	100,000	\$10,946.17
	200	200,000	\$18,007.84
	300	300,000	\$24,081.17
	400	400,000	\$29,382.84
	500	500,000	\$33,912.84
	600	600,000	\$38,442.84
	700	700,000	\$42,972.84
2,000	100	200,000	\$21,799.51
2,000	200	400,000	\$35,922.84
	300	600,000	\$48,069.51
	400	800,000	\$58,672.84
	500	1,000,000	\$67,732.84
	600	1,200,000	\$76,792.84
	700	1,400,000	\$85,852.84
	700	1,400,000	\$65,652.64
3,000	100	300,000	\$32,652.84
	200	600,000	\$53,837.84
	300	900,000	\$72,057.84
	400	1,200,000	\$87,962.84
	500	1,500,000	\$101,552.84
	600	1,800,000	\$115,142.84
	700	2,100,000	\$128,732.84
5,000	100	500,000	\$54,359.51
3,000		1,000,000	\$89,667.84
	200		
	300	1,500,000	\$120,034.51
	400	2,000,000	\$146,542.84
	500	2,500,000	\$169,192.84
	600	3,000,000	\$191,842.84
	700	3,500,000	\$214,492.84

^{(1) -} WINTER BILLS EXCLUDE SEASONAL USAGE EFFECT, IF ANY.

MISSOURI SMALL PRIMARY SERVICE CLASSIFICATION NO. 4 (M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES

			AVERAGE
kW	kWh/kW	kWh	MONTHLY BILL
100	1.00	10.000	41 216 26
100	100	10,000	\$1,316.36
	200	20,000	\$1,997.69
	300	30,000	\$2,585.03
	400	40,000	\$3,097.86
	500	50,000	\$3,536.19
	600	60,000	\$3,974.53
	700	70,000	\$4,412.86
500	100	50,000	\$5,332.36
	200	100,000	\$8,739.03
	300	150,000	\$11,675.69
	400	200,000	\$14,239.86
	500	250,000	\$16,431.53
	600	300,000	\$18,623.19
	700	350,000	\$20,814.86
	, 00	220,000	420,021.00
1000	100	100,000	\$10,352.36
	200	200,000	\$17,165.69
	300	300,000	\$23,039.03
	400	400,000	\$28,167.36
	500	500,000	\$32,550.69
	600	600,000	\$36,934.03
	700	700,000	\$41,317.36
2,000	100	200,000	\$20,392.36
_,	200	400,000	\$34,019.03
	300	600,000	\$45,765.69
	400	800,000	\$56,022.36
	500	1,000,000	\$64,789.03
	600	1,200,000	\$73,555.69
	700	1,400,000	\$82,322.36
3,000	100	300,000	\$30,432.36
	200	600,000	\$50,872.36
	300	900,000	\$68,492.36
	400	1,200,000	\$83,877.36
	500	1,500,000	\$97,027.36
	600	1,800,000	\$110,177.36
	700	2,100,000	\$123,327.36
5,000	100	500,000	\$50,512.36
, and the second	200	1,000,000	\$84,579.03
	300	1,500,000	\$113,945.69
	400	2,000,000	\$139,587.36
	500	2,500,000	\$161,504.03
	600	3,000,000	\$183,420.69
	700	3,500,000	\$205,337.36
	, 00	5,500,000	7205,557.50

^{(1) -} WINTER BILLS EXCLUDE SEASONAL USAGE EFFECT, IF ANY.

MISSOURI LARGE PRIMARY SERVICE CLASSIFICATION NO. 11(M) TYPICAL MONTHLY BILLS - EXCLUDING TAXES

				AVERAGE
	kW	kWh/kW	kWh	MONTHLY BILL
*	4,000	300	1,200,000	\$102,168.53
	,	400	1,600,000	\$115,381.86
		500	2,000,000	\$128,595.19
		600	2,400,000	\$141,808.53
		700	2,800,000	\$155,021.86
	5,000	300	1,500,000	\$112,078.53
		400	2,000,000	\$128,595.19
		500	2,500,000	\$145,111.86
		600	3,000,000	\$161,628.53
		700	3,500,000	\$178,145.19
	10,000	300	3,000,000	\$223,795.19
		400	4,000,000	\$256,828.53
		500	5,000,000	\$289,861.86
		600	6,000,000	\$322,895.19
		700	7,000,000	\$355,928.53
	20,000	300	6,000,000	\$447,228.53
		400	8,000,000	\$513,295.19
		500	10,000,000	\$579,361.86
		600	12,000,000	\$645,428.53
		700	14,000,000	\$711,495.19
	30,000	300	9,000,000	\$670,661.86
		400	12,000,000	\$769,761.86
		500	15,000,000	\$868,861.86
		600	18,000,000	\$967,961.86
		700	21,000,000	\$1,067,061.86
	50,000	300	15,000,000	\$1,117,528.53
		400	20,000,000	\$1,282,695.19
		500	25,000,000	\$1,447,861.86
		600	30,000,000	\$1,613,028.53
		700	35,000,000	\$1,778,195.19
	######	300	30,000,000	\$2,234,695.19
		400	40,000,000	\$2,565,028.53
		500	50,000,000	\$2,895,361.86
		600	60,000,000	\$3,225,695.19
		700	70,000,000	\$3,556,028.53

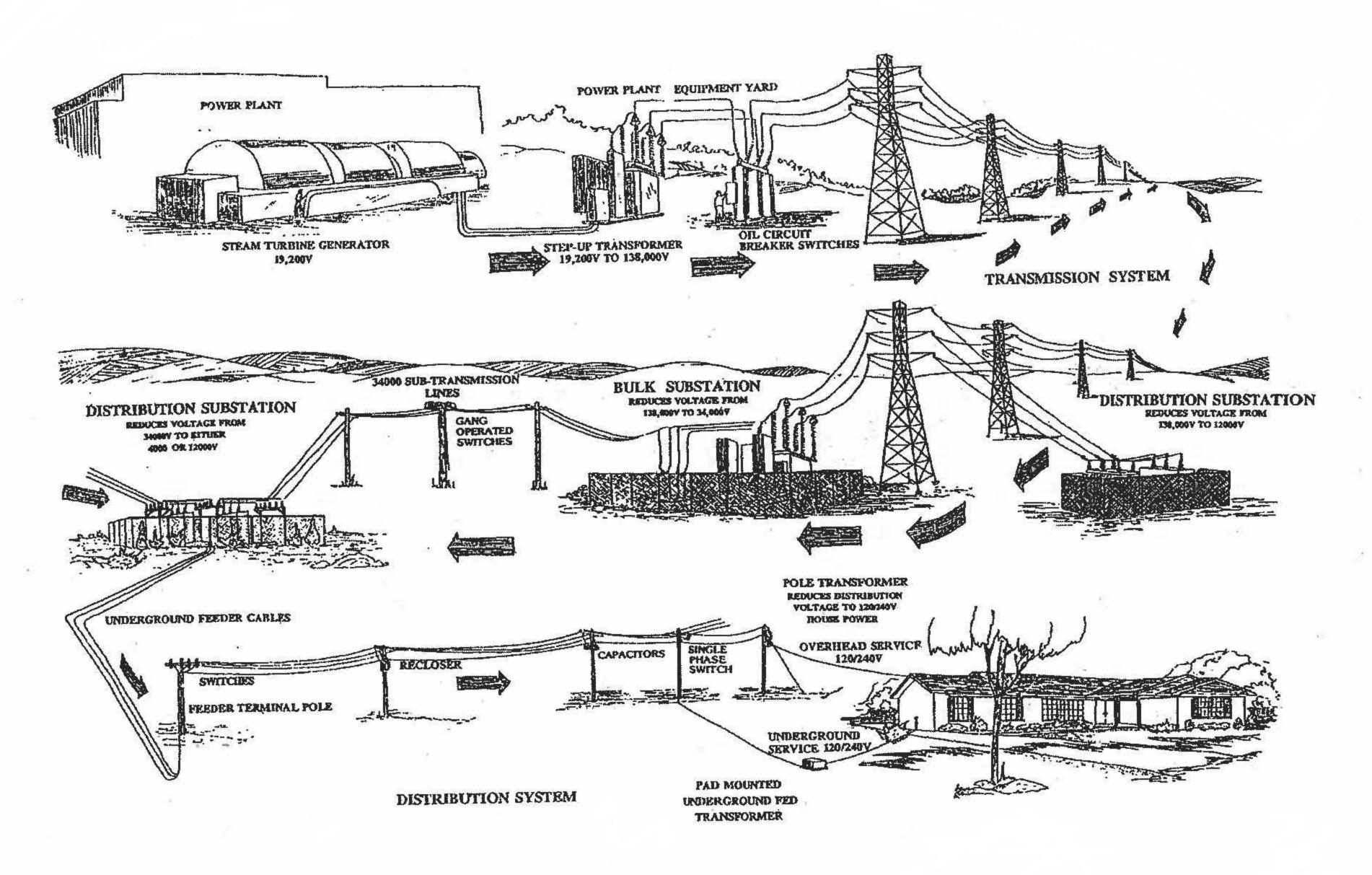
^{* -} BILLS REFLECT MINIMUM BILLING DEMAND OF 5,000 kW.

MISSOURI

LARGE TRANSMISSION SERVICE CLASSIFICATION NO. 12(M)
TYPICAL MONTHLY BILLS - EXCLUDING TAXES

	kW	kWh/kW	kWh	AVERAGE MONTHLY BILL
_		<u> </u>		
*	4,000	300	1,200,000	\$79,219.33
		400	1,600,000	\$89,960.67
		500	2,000,000	\$100,702.00
		600	2,400,000	\$111,443.33
		700	2,800,000	\$122,184.67
	5,000	300	1,500,000	\$87,275.33
		400	2,000,000	\$100,702.00
		500	2,500,000	\$114,128.67
		600	3,000,000	\$127,555.33
		700	3,500,000	\$140,982.00
	10,000	300	3,000,000	\$172,738.67
		400	4,000,000	\$199,592.00
		500	5,000,000	\$226,445.33
		600	6,000,000	\$253,298.67
		700	7,000,000	\$280,152.00
	20,000	300	6,000,000	\$343,665.33
		400	8,000,000	\$397,372.00
		500	10,000,000	\$451,078.67
		600	12,000,000	\$504,785.33
		700	14,000,000	\$558,492.00
	30,000	300	9,000,000	\$514,592.00
		400	12,000,000	\$595,152.00
		500	15,000,000	\$675,712.00
		600	18,000,000	\$756,272.00
		700	21,000,000	\$836,832.00
	50,000	300	15,000,000	\$856,445.33
		400	20,000,000	\$990,712.00
		500	25,000,000	\$1,124,978.67
		600	30,000,000	\$1,259,245.33
		700	35,000,000	\$1,393,512.00
	######	300	30,000,000	\$1,711,078.67
		400	40,000,000	\$1,979,612.00
		500	50,000,000	\$2,248,145.33
		600	60,000,000	\$2,516,678.67
		700	70,000,000	\$2,785,212.00

GENERATING AND POWER DISTRIBUTION SYSTEM



Ameren Missouri MISSOURI ELECTRIC OPERATIONS CLASS COST OF SERVICE ALLOCATION STUDY

TITLE: SUMMARY CURRENT ROR RESULTS (\$000'S)		_		RESIDENTIAL		SMALL GENERAL SERV		LARGE G.S. /		LARGE PRIMARY		LARGE TRANSMISSION		LIGHTING	
												.====		_	
1	BASE REVENUE	\$ 2	,580,158	\$ 1	,170,105	\$	288,054	\$	749,850	\$	189,820	\$	147,949	\$	34,380
2	OTHER REVENUE	\$	68,583	\$	38,657	\$	6,658	\$	15,873	\$	3,763	\$	3,078	\$	555
3	LIGHTING REVENUE	\$	-	\$	-	\$	_	\$	_	\$	_	\$	_	\$	-
4	SYSTEM, OFF-SYS SALES & DISP OF ALLOW	\$	360,103	\$	133,880	\$	34,603	\$	115,232	\$	36,067	\$	38,542	\$	1,780
5	RATE REVENUE VARIANCE	\$		\$		\$		\$	_	\$		\$		\$	
6	TOTAL OPERATING REVENUE	\$ 3	,008,844	\$ 1	,342,642	\$	329,314	\$	880,954	\$	229,650	\$	189,568	\$	36,715
7															
8	TOTAL PROD, T&D, CUST, AND A&G EXP	\$ 1	,982,446	\$	898,942	\$	198,571	\$	561,186	\$	159,113	\$	144,313	\$	20,321
9	TOTAL DEPR AND AMMORT EXPENSES	\$	461,617	\$	243,153	\$	49,410	\$	116,132	\$	26,841	\$	17,341	\$	8,741
10	REAL ESTATE AND PROPERTY TAXES	\$	142,152	\$	74,466	\$	15,498	\$	35,478	\$	8,288	\$	5,826	\$	2,597
11	INCOME TAXES	\$	203,097	\$	104,613	\$	21,783	\$	52,037	\$	12,541	\$	8,856	\$	3,267
12	PAYROLL TAXES	\$	23,042	\$	11,897	\$	2,428	\$	5,845	\$	1,463	\$	985	\$	425
13	FEDERAL EXCISE TAX	\$	-	\$	=	\$	=	\$	=	\$	=	\$	=	\$	-
14	REVENUE TAXES	\$		\$		\$		\$		\$		\$		\$	
15															
16	TOTAL OPERATING EXPENSES	\$ 2	,812,354	\$ 1	,333,071	\$	287,689	\$	770,678	\$	208,246	\$	177,320	\$	35,351
17															
18	NET OPERATING INCOME	\$	196,490	\$	9,571	\$	41,626	\$	110,276	\$	21,404	\$	12,249	\$	1,365
19															
20	GROSS PLANT IN SERVICE	\$14	,610,042	\$ 7	,646,261	\$	1,587,513	\$	3,660,297	\$	854,696	\$	595,719	\$	265,557
21	RESERVES FOR DEPRECIATION	\$ 6	,238,748	\$ 3	,296,500	\$	681,502	\$	1,534,654	\$	351,261	\$	247,121	\$	127,710
22															
23	NET PLANT IN SERVICE	\$ 8	,371,294	\$ 4	,349,761	\$	906,011	\$	2,125,643	\$	503,435	\$	348,598	\$	137,847
24															
25	MATERIALS & SUPPLIES - FUEL	\$	260,508	\$	96,853	\$	25,033	\$	83,362	\$	26,092	\$	27,882	\$	1,287
26	MATERIALS & SUPPLIES -LOCAL	\$	170,308	\$	108,482	\$	19,556	\$	30,290	\$	5,016	\$	3	\$	6,961
27	CASH WORKING CAPITAL	\$	44,894	\$	20,357	\$	4,497	\$	12,708	\$	3,603	\$	3,268	\$	460
28	CUSTOMER ADVANCES & DEPOSITS	\$	(19,448)	\$	(10,815)	\$	(4,742)	\$	(3,617)	\$	_	\$	(125)	\$	(149)
29	ACCUMULATED DEFERRED INCOME TAXES	\$(2	,017,383)	\$(1	,056,796)	\$	(219,937)	\$	(503,492)	\$	(117,621)	\$	(82,674)	\$	(36,862)
30															
31	TOTAL NET ORIGINAL COST RATE BASE	\$ 6	,810,174	\$ 3	,507,841	\$	730,419	\$	1,744,893	\$	420,524	\$	296,952	\$	109,545
32															
33	RATE OF RETURN		2.885%		0.273%		5.699%		6.320%		5.090%		4.125%		1.246%

Ameren Missouri MISSOURI ELECTRIC OPERATIONS CLASS COST OF SERVICE ALLOCATION STUDY EQUALIZED CLASS RATES OF RETURN ANALYSIS

	TITLE: SUMMARY EQUAL ROR (\$000's)						SMALL				LARGE				
		1	MISSOURI	RE	SIDENTIAL	<u>GE1</u>	IERAL SERV	SM	ALL PRIMARY		<u>PRIMARY</u>	TRA	NSMISSION	L	<u>IGHTING</u>
1	BASE REVENUE	\$	2,955,723	\$	1,455,193	\$	307,783	\$	786,145	\$	203,741	\$	160,644	\$	42,217
2	OTHER REVENUE	\$	68,583	\$	38,657	\$	6,658	\$	15,873	\$	3,763	\$	3,078	\$	555
3	LIGHTING REVENUE	\$	-	\$	_	\$	-	\$	-	\$	_	\$	-	\$	-
4	SYSTEM, OFF-SYS SALES & DISP OF ALLOW	\$	360,103	\$	133,880	\$	34,603	\$	115,232	\$	36,067	\$	38,542	\$	1,780
5	RATE REVENUE VARIANCE	\$		\$		\$		\$		\$		\$		\$	
6	TOTAL OPERATING REVENUE	\$	3,384,409	\$	1,627,730	\$	349,044	\$	917,249	\$	243,570	\$	202,264	\$	44,552
7															
8	TOTAL PROD., T&D, CUSTOMER, AND A&G EXP.	\$	1,982,446	\$	898,942	\$	198,571	\$	561,186	\$	159,113	\$	144,313	\$	20,321
9	TOTAL DEPR. AND AMMOR. EXPENSES	\$	461,617	\$	243,153	\$	49,410	\$	116,132	\$	26,841	\$	17,341	\$	8,741
10	REAL ESTATE AND PROPERTY TAXES	\$	142,152	\$	74,466	\$	15,498	\$	35,478	\$	8,288	\$	5,826	\$	2,597
11	INCOME TAXES	\$	203,097	\$	104,613	\$	21,783	\$	52,037	\$	12,541	\$	8,856	\$	3,267
12	PAYROLL TAXES	\$	23,042	\$	11,897	\$	2,428	\$	5,845	\$	1,463	\$	985	\$	425
13	FEDERAL EXCISE TAX	\$	_	\$	_	\$	_	\$	_	\$	_	\$	_	\$	-
14	REVENUE TAXES	\$		\$		\$		\$		\$		\$		\$	
15															
16	TOTAL OPERATING EXPENSES	\$	2,812,354	\$	1,333,071	\$	287,689	\$	770,678	\$	208,246	\$	177,320	\$	35,351
17															
18	NET OPERATING INCOME	\$	572,055	\$	294,659	\$	61,355	\$	146,571	\$	35,324	\$	24,944	\$	9,202
19															
20	GROSS PLANT IN SERVICE	\$ 1	4,610,042	\$	7,646,261	\$	1,587,513	\$	3,660,297	\$	854,696	\$	595,719	\$	265,557
21	RESERVES FOR DEPRECIATION	\$	6,238,748	\$	3,296,500	\$	681,502	\$	1,534,654	\$	351,261	\$	247,121	\$	127,710
22															
23	NET PLANT IN SERVICE	\$	8,371,294	\$	4,349,761	\$	906,011	\$	2,125,643	\$	503,435	\$	348,598	\$	137,847
24															
25	MATERIALS & SUPPLIES - FUEL	\$	260,508	\$	96,853	\$	25,033	\$	83,362	\$	26,092	\$	27,882	\$	1,287
26	MATERIALS & SUPPLIES -LOCAL	\$	170,308	\$	108,482	\$	19,556	\$	30,290	\$	5,016	\$	3	\$	6,961
27	CASH WORKING CAPITAL	\$	44,894	\$	20,357	\$	4,497	\$	12,708	\$	3,603	\$	3,268	\$	460
28	CUSTOMER ADVANCES & DEPOSITS	\$	(19,448)	\$	(10,815)	\$	(4,742)	\$	(3,617)	\$	_	\$	(125)	\$	(149)
29	ACCUMULATED DEFERRED INCOME TAXES	\$ (2,017,383)	\$ ((1,056,796)	\$	(219,937)	\$	(503,492)	\$	(117,621)	\$	(82,674)	\$	(36,862)
30		-				-			_				_		_
31	TOTAL NET ORIGINAL COST RATE BASE	\$	6,810,174	\$	3,507,841	\$	730,419	\$	1,744,893	\$	420,524	\$	296,952	\$	109,545
32			•		, , , -		,	·	, , , , , , , , ,	•	,		,	•	,
	RATE OF RETURN		8.400%		8.400%		8.400%		8.400%		8.400%		8.400%		8.400%

Ameren Missouri CASE NO. ER-2012-0166 PROPOSED CLASS REVENUE REQUIREMENTS (\$000's)

Customer Class	Proposed Base Revenue				
Residential	\$	1,340,393			
Small General Service	\$	329,979			
Large General Service	\$	617,889			
Small Primary Service	\$	241,113			
Large Primary Service	\$	217,450			
Large Transmission Service	\$	169,485			
Lighting	\$	39,383			
Total	\$	2.955.691			