MIEC 504

Exhibit No.: Issues:

Witness: Type of Exhibit: Sponsoring Party: Case No.: Date Testimony Prepared:

Cost of Service, Revenue Allocation, and Rate Design Maurice Brubaker Surrebuttal Testimony Missouri Industrial Energy Consumers ER-2012-0166 September 7, 2012

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

October 02, 2012 Data Center Missouri Public Service Commission

Filed

In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service

Case No. ER-2012-0166 Tariff No. YE-2012-0370

Surrebuttal Testimony and Schedules of

**Maurice Brubaker** 

on Cost of Service, Revenue Allocation and Rate Design

On behalf of

**Missouri Industrial Energy Consumers** 

September 7, 2012



BRUBAKER & ASSOCIATES, INC. MSEC Exhibit No. 506

Date 9-5-2 Reporter VS File No. 5-2-2012-0166

Project 9553

### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service

Case No. ER-2012-0166 Tariff No. YE-2012-0370

STATE OF MISSOURI COUNTY OF ST. LOUIS

SS

### Affidavit of Maurice Brubaker

Maurice Brubaker, being first duly sworn, on his oath states:

1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

Attached hereto and made a part hereof for all purposes are my surrebuttal 2. testimony and schedules which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2012-0166.

I hereby swear and affirm that the testimony and schedules are true and correct 3. and that they show the matters and things that they purport to show.

auríce Brubakei

Subscribed and sworn to before me this 6<sup>th</sup> day of September, 2012.

TAMMY S. KLOSSNER Notary Public - Notary Seal STATE OF MISSOURI St. Charles County My Commission Expires: Mar. 14, 2015 Commission # 1102486

otary Public

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### BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company, d/b/a Ameren Missouri's Tariff to Increase Its Annual Revenues for Electric Service Case No. ER-2012-0166 Tariff No. YE-2012-0370

### Surrebuttal Testimony of Maurice Brubaker

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- 1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
  Chesterfield, MO 63017.

### 4 Q ARE YOU THE SAME MAURICE BRUBAKER WHO HAS PREVIOUSLY FILED 5 TESTIMONY IN THIS PROCEEDING?

- A Yes. I have previously filed direct and rebuttal testimony on class cost of service and
  revenue allocation issues presented in this proceeding and direct testimony on
  revenue requirement issues.
- 9 Q ARE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE OUTLINED IN

### 10 YOUR PRIOR TESTIMONY?

- A Yes. This information is included in Appendix A to my revenue requirement direct
   testimony filed July 6, 2012.
- 13 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?
- A This testimony is presented on behalf of the Missouri Industrial Energy Consumers
  ("MIEC").

### 1 Introduction and Summary

### 2 Q WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

- A The purpose is to address certain cost of service and revenue allocation positions
  taken in the rebuttal testimony of other parties.
- 5 First, I address the position taken by Staff witness Scheperle with respect to 6 the identification and separate assignment of energy efficiency ("EE")<sup>1</sup> related costs 7 by customer class. I then respond to certain cost of service and revenue allocation 8 positions taken by Ameren Missouri witnesses Warwick and Cooper, and by Office of 9 Public Counsel ("OPC") witness Meisenheimer.
- 10 I also present a comparison of the results of the cost of service studies that
   11 have been presented in this case.

### 12 Q WHAT ARE YOUR PRINCIPAL FINDINGS AND RECOMMENDATIONS?

- 13 A These are as follows:
- EE expenditures are different from all other elements of the revenue requirement in this case, and vary significantly across customer classes.
- 162. The responsibility for EE costs ranges from 5% in the case of the Residential17class to "zero" in the case of the Large Transmission Service ("LTS") customer18class.
- 193. The LTS customer has exercised the opt-out provisions in the MEEIA statute and20in the Commission's Rules, does not participate in the EE program, and does not21cause Ameren Missouri to incur EE related costs.
- 4. Because of this opt-out, and the significant differences among customer classes in terms of responsibility for EE costs, proposals to allocate any approved increase on an equal percentage basis (Ameren Missouri), or nearly an equal percentage basis (Commission Staff) would essentially deny the benefit of the opt-out provision to the LTS customer. The increase to the LTS customer must be at least 4 percentage points less than the system average increase in order to recognize the opt-out.

<sup>&</sup>lt;sup>1</sup>As used in this testimony, EE refers to the investments related to the Missouri Energy Efficiency Investment Act ("MEEIA") as well as to those pre-MEEIA costs that are being amortized to income over a period of time.

- 1 5. In response to Staff's disagreement with my revenue allocation approach, I have 2 produced a class cost of service study that excludes the EE expenditures. The 3 results of this study are comparable to the results of the study contained in my 4 direct testimony that included the EE revenue requirement components. The 5 conclusion to be drawn from these studies is that the rate spread 6 recommendation I made in my direct testimony is supported by cost of service 7 studies, recognizes the unique nature of the EE expenditures, and appropriately 8 implements the opt-out provision.
- 9
  6. OPC's cost of service studies should be rejected because they utilize methods
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  11
  6. OPC's cost of service studies should be rejected because they utilize methods
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  11
- The method the Staff and MIEC have used to classify production operation and maintenance ("O&M") expenses between fixed expenses and variable expenses is appropriate and should be adopted.
- Mr. Cooper's "illustrative" revenue requirement shift is not supported and should not be adopted.

### 17 Identification and Specific Assignment of

### 18 Energy Efficiency Related Revenue Requirements

19 Q WHAT IS MR. SCHEPERLE'S POSITION ON YOUR HANDLING OF EE REVENUE

### 20 REQUIREMENTS?

- 21 A Although Mr. Scheperle does not disagree with the class-specific assignments of
- 22 costs related to EE, he nevertheless disagrees with how I have specifically assigned
- 23 the EE related revenue requirement to customer classes as a part of my revenue
- 24 allocation recommendation. He believes it is inappropriate to identify, and treat
- 25 separately, a particular item that is included in a cost of service study.

### 26 Q HOW DO YOU RESPOND TO MR. SCHEPERLE?

27 A First, if we were setting rates so that each class earned the system average rate of
28 return (i.e., its cost of service), there would be no issue. All appropriate costs would
29 be assigned and the rates would properly reflect those costs. The primary reason for

not doing so is gradualism, in order to avoid too large of an impact on classes earning
 below the system average rate of return, namely the Residential class and the
 Lighting class.

4 Q MR. SCHEPERLE ARGUES THAT IF YOU SEPARATELY TREAT ONE REVENUE
5 REQUIREMENT ITEM, NAMELY EE COSTS, THAT IT WOULD BE APPROPRIATE
6 TO SEPARATELY TREAT OTHER REVENUE REQUIREMENT ITEMS, WHICH HE
7 ILLUSTRATES USING FUEL COST. DO YOU AGREE?

8 A No. Fuel costs, along with costs such as generation and transmission costs, are
 9 incurred to provide electric service to all customers. There is no logic for separating
 10 out any of these items like there is for EE costs.

11 Q WHY ARE EE COSTS DIFFERENT AND WHY DO THEY REQUIRE SEPARATE 12 ASSIGNMENT?

13 А EE costs are not costs incurred to provide electric service in the conventional sense 14 of the word. Rather, EE costs are those costs which are incurred, it could be said, "to 15 not provide electric service." In other words, the EE costs are incurred to provide 16 certain customers (who qualify under Ameren Missouri's EE programs) with devices 17 and/or incentives which enable them to use less electricity while achieving the same 18 degree of satisfaction, comfort, or level of production. In fact, these programs and 19 costs are so different from other electric utility costs that legislation, extensive 20 rulemaking and a separate proceeding were required in order to make these 21 programs practical and capable of implementation.

As I noted in my rebuttal testimony, the responsibility for these costs varies significantly across customer classes. Because residential programs are the most

1 expensive to provide, and because of the sheer number of residential customers, the 2 EE related revenue requirement associated with the Residential class is 5% of its 3 revenues. The revenue requirement associated with these costs for the Small 4 General Service ("SGS") class is 2.2% of its revenues, for the Large General Service 5 ("LGS")/Small Primary Service ("SPS") class is 4.3% of its revenues and for the Large 6 Power Service ("LPS") class is 4% of its revenues. In marked contrast, the LTS class 7 bears absolutely no cost responsibility for these programs. Operating in accordance 8 with the opt-out provision of the Commission Rules, the LTS customer has chosen to 9 fund its own EE activities, and not rely upon Ameren Missouri's general programs for 10 funding. Accordingly, the cost responsibility of the LTS class for EE programs is 11 "zero,"

Q WHAT ARE THE CONSEQUENCES IF THE INCREASE WERE TO BE APPLIED
 AS AN EQUAL PERCENTAGE (AS PROPOSED BY AMEREN MISSOURI) OR AS
 A NEARLY EQUAL PERCENTAGE (AS PROPOSED BY STAFF)?

Both of these approaches would ignore the nature of the EE costs and, with respect to the LTS customer, would essentially amount to a repudiation of the opt-out provision of the statute and the Commission Rules. As a result of implicitly assigning EE costs to the LTS customer, the LTS customer would essentially be required to involuntarily fund a program for which it receives no benefit and has opted out of the program in compliance with the Commission Rules.

1QHAVE YOU PREPARED ANY ANALYSIS TO ADDRESS MR. SCHEPERLE'S2CONCERN ABOUT SEPARATELY ASSIGNING EE COSTS IN THE REVENUE3ALLOCATION STEP WHEN THOSE COSTS HAVE BEEN INCLUDED IN THE4CLASS COST OF SERVICE STUDY?

5 A Yes. I have prepared Schedule MEB-COS-SUR-1.

6 Q PLEASE EXPLAIN THIS SCHEDULE.

A Schedule MEB-COS-SUR-1 is identical to the cost of service study presented in my
 direct testimony as Schedule MEB-COS-4, with a single exception, namely that
 Schedule MEB-COS-SUR-1 excludes all of the EE related revenue requirement
 components.

11 Q HOW DO THE RESULTS COMPARE TO THE COST OF SERVICE STUDY WHICH
 12 YOU ATTACHED AS SCHEDULE MEB-COS-4 TO YOUR DIRECT TESTIMONY?
 13 A The results are generally the same. That is, the Residential and Lighting classes
 14 have below average rates of return while all other classes have above average rates
 15 of return.<sup>2</sup>

16 Q HOW DO THE REVENUE NEUTRAL ADJUSTMENTS AT PRESENT RATES FOR
 17 THIS STUDY FORMAT COMPARE TO WHAT YOU CALCULATED EARLIER AND
 18 SHOWED ON SCHEDULE MEB-COS-5 TO YOUR DIRECT TESTIMONY?
 19 A The results are generally the same. Customer classes earning in excess of their cost

20 of service (namely SGS, LGS/SPS, LPS and LTS) continue to do so, and customer

<sup>2</sup>The details of the cost of service study are in the attachment to Schedule MEB-COS-SUR-1.

classes earning below their cost of service (Residential and Lighting) continue to be
 below their cost of service.

3 Q WHAT IS THE OVERALL CONCLUSION TO BE DRAWN FROM THESE TWO
4 SURREBUTTAL EXHIBITS?

5 A The overall conclusion is this: The revenue increase allocation that I proposed in my 6 direct testimony is consistent with cost of service principles, respects the opt-out 7 provision, particularly as it applies to Rate LTS, and is appropriate.

### 8 Q PLEASE EXPLAIN THE BASIS FOR THIS CONCLUSION.

9 A Referring again to Schedule MEB-COS-SUR-2, note that the increase required to
10 move the Residential class to parity (excluding EE costs) is 8.2% before any
11 increases awarded to Ameren Missouri. This is far higher than the modest 2%
12 adjustment I proposed. Note also that the decreases appropriate for the business
13 classes (SGS, LGS/SPS, LPS and LTS) are all more than the downward adjustment
14 of 1.75% that I proposed.

15 Accordingly, whether revenue allocation proposals are tested against a class 16 cost of service study that includes EE expenditures, or whether those revenue 17 allocation proposals are tested against class cost of service results that do not 18 include EE revenue requirements, the conclusion is the same. Namely: (1) a 2.0% 19 revenue neutral increase to the Residential and Lighting classes, accompanied by an 20 offsetting 1.75% decrease to all other customer classes, (2) plus a specific 21 assignment of the EE revenue requirement, and (3) an equal percentage increase of 22 any additional revenues (above the EE increase) on an equal percentage basis, is 23 appropriate.

> Maurice Brubaker Page 7

1 Q

### Q PLEASE EXPLAIN WHO BENEFITS FROM THE EE PROGRAMS?

A In the short-run, only those customers who participate in the programs have the possibility of being better-off. They would be better off only if the savings that they experience in the electric bill is more than the sum of their directly incurred costs plus the EE charges that they would pay. Customers who do not participate, and who do not opt-out, clearly would be worse off because they are being charged for EE costs, yet receiving no direct benefit.

8 Q WHAT ARE THE EXPECTATIONS IN THE LONG-RUN?

9 A Please see Schedule MEB-COS-SUR-3 attached to my testimony. This is Ameren
 10 Missouri's cost-effectiveness test summary which presents the results of the standard
 11 cost-effectiveness measures for EE programs. The impact on rates is determined by
 12 the ratepayer impact measure ("RIM").

13 Q WHAT IS THE BASIS OF THE RIM TEST?

A Under the RIM test, the benefits are the costs avoided as a result of implementing the
 EE programs. The costs consist of incentives paid to participants, other costs
 incurred by the utility, and the loss in revenues as a result of diminished consumption.
 Costs also include the cost to administer, deliver and evaluate the EE program.

18 Q HOW SHOULD THE RESULTS OF THE RIM TEST BE INTERPRETED?

A Under the RIM test, a ratio of less than 1.0 means that implementation of the program
 will cause rates to be higher than they would have been had the program not been
 implemented and instead the utility had pursued supply-side resources. Note that
 nearly all the programs have the effect of increasing rates.

In particular, the residential programs have a total RIM of 0.68, the business
 programs have a total RIM of 0.79, and the overall composite portfolio has a RIM of
 0.72.

### 4 Other Issues Raised By Staff

5 Q MR. SCHEPERLE BELIEVES THAT ONLY THE STAFF APPROPRIATELY 6 ADJUSTED CLASS DEMAND AND ENERGY FOR WEATHER AND FOR THE 7 ANTICIPATED AFFECTS OF EE. WHAT WOULD BE THE IMPACT OF MAKING 8 THESE ADJUSTMENTS?

9 А As Mr. Scheperle states on page 6 of his testimony with respect to the EE 10 adjustment, "...this would not result in a significant variation." The difference in the 11 weather adjustment also does not produce a significant difference. This is clear from 12 Table 1 on page 3 of Mr. Scheperle's rebuttal testimony where he compares the class 13 allocation factors for the various methods. Note that the allocation factors for every 14 class under Staff's version of BIP, Ameren Missouri's A&E 4NCP allocation, MIEC's 15 A&E 4NCP allocation and OPC's A&E 4NCP allocation are essentially the same 16 number. Accordingly, any differences created by these adjustments would be 17 insignificant and can be disregarded for purposes of this case.

18 OPC's Studies

19QIN YOUR REBUTTAL TESTIMONY, YOU ADDRESSED OPC'S COST OF20SERVICE STUDIES. DO YOU HAVE ANY FURTHER RESPONSE TO21MS. MEISENHEIMER'S REBUTTAL TESTIMONY?

A Yes. While in her rebuttal testimony she may have corrected some minor errors, the
 basic studies presented by OPC continue to rely upon inappropriate allocation

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1 methodologies including a generation allocation methodology previously rejected by 2 this Commission on several occasions. OPC's allocation of the margin from 3 off-system sales similarly has been previously rejected by this Commission on several 4 occasions. OPC's allocation of the customer component of the distribution system is 5 at odds with accepted procedures, and is an allocation method that I have never 6 before seen employed. And, OPC's allocation of EE costs is at odds with the 7 stipulation OPC signed in the MEEIA case. OPC's studies should be rejected.

8 <u>Reply to Ameren Missouri</u>

9 Q HOW DO YOU RESPOND TO AMEREN MISSOURI WITNESS WARWICK'S 10 TESTIMONY AT PAGE 5 OF HIS REBUTTAL CONCERNING THE 11 CLASSIFICATION OF CERTAIN NON-LABOR COSTS IN THE PRODUCTION 12 **O&M ACCOUNTS?** 

13 А Mr. Warwick provides only a very general response. He cites some particular items 14 that he says could be variable, but does not provide any quantification of them. He is critical of my statement that the "hours of operation" used for scheduling maintenance 15 16 is indicative of the fact that these costs are fixed because they occur on a periodic 17 basis. Instead, he argues that hours of operation would be comparable to kWh. But, 18 Ameren Missouri does not schedule its major maintenance on the basis of kWh 19 generated by its units. Maintenance is performed to maintain plant efficiency and 20 reliability and is not scheduled as a function of the number of kWh generated. 21 Rather, the maintenance intervals are essentially fixed intervals of time as dictated by 22 the calendar, and not by kWh.

> Maurice Brubaker Page 10

1 Q IS THE CLASSIFICATION OF PRODUCTION OF O&M EXPENSE THAT YOU AND 2 MR. SCHEPERLE HAVE EMPLOYED A METHOD ACCEPTED IN THE 3 INDUSTRY?

4 А Yes. For example, in the current and previous Kansas City Power & Light Company 5 rate cases (Case Nos. ER-2010-0355 and ER-2012-0174); the currently pending and 6 previous KCP&L Greater Missouri Operations Company rate cases (Case Nos. ER-7 2010-0356 and ER-2012-0175); and in the previous Empire District Electric Company 8 rate case (Case No. ER-2011-0004), where a class cost of service study was filed. 9 the utilities (with de minimis exceptions) proposed the identical classification of 10 production of O&M expense between fixed and variable categories that I have 11 proposed in this case. It is also the method that the Commission Staff employed in 12 the previously referenced Kansas City Power & Light Company rate cases when 13 making allocations between Kansas and Missouri.

14QAT PAGE 10 OF HIS TESTIMONY, AMEREN WITNESS COOPER STATES THAT15IF NON-RESIDENTIAL CLASSES RECEIVE NON-UNIFORM INCREASES, THEN16THERE IS A POTENTIAL FOR RATE MIGRATION. ARE MR. COOPER'S17CONCERNS VALID IN THE CONTEXT OF YOUR PROPOSAL?

A No, I do not believe so. No customer is going to switch to the LTS rate, because no other customer is eligible to take service under this rate. The only possibility for migration under my proposal is from the LGS rate to SGS rate. The difference in the increase here is about 2 percentage points. But, the SGS rate is more than 20% higher than the LGS rate, so I do not think it is reasonable to believe that there would be switching from the lower price rate to the higher price rate. Accordingly, I do not

> Maurice Brubaker Page 11

believe that there is any concern about rate switching under my revenue allocation
 proposal.

Q HAVE YOU REVIEWED THE TESTIMONY OF AMEREN MISSOURI WITNESS
 COOPER AT PAGE 11 WITH RESPECT TO THE IMPACT OF RATE INCREASES
 ON CUSTOMERS?

- A Yes. At this point in his testimony, he quantifies, but does not support or recommend,
  what would happen if 1% of the Residential class increase were transferred to other
  classes.
- 9 Q HOW DO YOU RESPOND TO THIS TESTIMONY OF MR. COOPER?

A First, I would note that I am pleased to see that he does not recommend that this
action be taken. It is not clear why he raises it or how it is supposed to be viewed,
but it obviously is not a recommendation by Ameren Missouri.

- 13 Q WOULD SUCH A "SHIFT" IN REVENUES BE CONSISTENT WITH COST OF
   14 SERVICE EVIDENCE?
- 15 A No, far from it. The cost of service evidence presented by Ameren Missouri, by the 16 Commission Staff and by MIEC all clearly demonstrate that the LPS and LTS 17 customers are providing a higher rate of return to the utility than is the Residential 18 class. Accordingly, any shift of any part of the rate increase away from the residential 19 customers to customers in any of these other customer classes would be contrary to 20 cost of service principles and evidence, and would be significantly in conflict with the 21 central regulatory principle that the causer of the cost should pay the cost.

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### 1 <u>Comparison of Results</u>

2 HAVE YOU COMPILED A COMPARISON OF THE REVENUE NEUTRAL Q 3 PERCENTAGE CHANGE IN CLASS REVENUES REQUIRED TO EQUALIZE RATE 4 OF RETURN FOR THE VARIOUS STUDIES PRESENTED IN THIS CASE? 5 А This appears on Schedule MEB-COS-SUR-4. The information is presented both in a 6 tabular and a graphical form. This specific information displayed is the percentage 7 increase, at current rate levels, required to move each class to its cost of service. 8 Page 1 of Schedule MEB-COS-SUR-4 displays the results for Ameren Missouri's 9 study, the Staff's study, the MIEC study and the OPC study.

Page 2 of the schedule eliminates the OPC study from the comparison because it uses several methods that the Commission has previously rejected and, as discussed earlier, employs a treatment of EE expense that is contrary to the method prescribed in the stipulation in the MEEIA case to which OPC was a signatory.

### 15 Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

16 A Yes, it does.

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Maurice Brubaker Page 13

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# Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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(1)         (2)           isp of Allow         \$ 2,580,158         \$ 1,170,105         \$ 86,583         38,657         \$ 86,583         38,657         \$ 86,513         \$ 1,170,105         \$ 86,513         \$ 1,33,880           Isp of Allow         360,103         360,103         133,880         \$ 1,333,880         \$ 1,332,642         \$ 85,971         \$ 5           A&G Expense         \$ 1,901,528         \$ 856,971         \$ 7,4,466         \$ 7,466		Description		Missouri Total	   	Resi	Residential	. G	Small Gen. Service	א ה	Large G.S./ Sm Primary		Large Primary	1 <u>1</u>	Large Transmission	-	Lighting
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Isp of Allow         360,103         133,860         34,603         115,222         36,667         38,542         5         139,409         5           Add Expense         3         1,342,662         5         323,314         5         130,963         5         139,409         5           Add Expense         3         1,342,66         5         5,355,842         5         15,304         5         139,409         5           Add Expenses         147,107         266,756         14,420         5         55,842         5         15,944         5         139,409         5           Add Expenses         142,127         266,756         13,530         16,036         50,405         5,153         5         139,409         5           Rates         5,643         7,1140         5         757,513         5         19,4710         5         196,533         5         19,915         5         2           Rates         5         2610,326         5         1,46,222         5         5,434         5         19,4710         5         199,453         5         19         1         1         1         1         1         1         1         1         1	Base Revenue Other Revenue		↔	2,580,158 68,583			,170,105 38,6 <i>5</i> 7	<del></del>	288,054 6,658	\$	749,850 15,873	\$	189,820 3,763		147,949 3,078	\$	34,380 555
5         3,006,844         5         1,342,642         5         1,342,642         5         1,342,642         5         1,50,343         5         1,333,30         1,333,30         1,34,320         5         55,55,843         5         1,333,30         5,336,943         5         1,333,30         5,34,75         5         1,333,30         1,333,30         1,343,30         1,343,30         5,4466         7,341         5         5,55,84         5         1,333,30         5,536,84         5         1,333,30         5,536,84         5         1,333,30         5,536,85         5         1,333,30         5,536,85         <	Lignting Kevenue System, Off-Sys Sales 8 Rate Revenue Variance	e Sales & Disp of Allow 'ariance		360,103 -	~		- 133,880 7		- 34,603 -		- 115,232 "		- 36,067 -		- 38,542 -		- 1,780 -
A&G Expense         1,901,528         853,971         5         194,420         5         553,632         5         150,943         5         153,000         5           Tarkes         147,107         236,756         13,330         15,436         55,638         17,341         5,683         5,835         5,935         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936         5,936	Total Operating Revenue	Revenue	₩	3,008,844	_		,342,642	6	329,314	60	880,954	\$	229,650	↔	189,568	6	36,715
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The formula for the formula for the formula for the formula formula formula for the formula f	Payroll Taxes Federal Excise Taxes	Taxes		23,042			11,897		2,428		5,845		1,463		285 1985 1		- 425
The set of	Total Operating Expenses	e Expenses	69	2,610,326			.196,420	\$	277,140	69	737,513	. 69	197,110	69	169,653	↔	32,489
\$ 14,532,731       \$ 7,612,246       \$ 1,534,049       \$ 3,527,391       \$ 847,768       \$ 5,565719       \$ 2         6,238,748       3,296,500       681,502       1,534,654       3,51,261       2,47,121       1         5       8,293,983       \$ 4,315,746       \$ 902,547       \$ 2,092,738       \$ 496,507       \$ 348,598       \$ 1         1       \$ 2,203,383       \$ 4,315,746       \$ 902,547       \$ 2,092,738       \$ 496,507       \$ 348,598       \$ 1         1       \$ 1,70,308       108,482       19,556       30,290       5,016       \$ 27,882       \$ 1         1       \$ 44,894       20,303       \$ 4,580       12,551       3,564       3,301       \$ 1,2551       3,564       3,301         1       10,8482       19,556       30,2492       5,016       \$ 27,882       \$ 1,2551       3,564       3,301         1       10,8482       19,556       30,2492       5,016       \$ 27,882       \$ 3,301         1       20,303       \$ 4,580       12,631       (10,615)       (11,621)       (125)         0       20,17       \$ 23,643       3,614       3,301       (125)       (125)         0       21,017,383       (10,615)	Net Oper	ating Income	÷	398,518			146,222	¢	52,174	49	143,441	\$	32,539		19,915	\$	4,226
\$ 8,293,983       \$ 4,315,746       \$ 902,547       \$ 2,092,738       \$ 496,507       \$ 343,598       \$ 1         \$ 260,508       \$ 96,853       \$ 25,033       \$ 83,362       \$ 26,992       \$ 27,882       \$ 1         \$ 170,308       108,482       19,556       30,290       5,016       \$ 27,882       \$ 3,301         \$ 44,894       20,303       4,590       12,551       3,564       3,301         \$ (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         \$ (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         \$ (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         \$ (19,7393)       (1,056,796)       2,219,937       (3,617)       -       (125)         \$ 6,732,863       \$ 3,473,773       \$ 727,048       \$ 1,711,931       \$ 413,557       \$ 296,935       \$ 1         \$ 5,919%       4,3209%       7.176%       8 .379%       7.868%       6.706%       \$ 706%	Gross Plant in Service Reserves for Depreciation	Service epreciation		14,532,731 6,238,748			,612,246 ,296,500	ŝ	1,584,049 681,502	↔	3,627,391 1,534,654	ŝ	847,768 351,261	↔	595,719 247,121	⇔	265,557 127,710
\$ 260,508       \$ 96,853       \$ 25,033       \$ 83,362       \$ 26,092       \$ 27,882       \$         170,308       108,482       19,556       30,290       5,016       3       3         44,894       20,303       4,590       12,651       3,564       3,301         (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         (19,443)       (10,815)       (4,742)       (3,617)       -       (125)         (19,5433)       (10,56,796)       (219,937)       (553,492)       (117,621)       (82,674)         \$ 6,732,863       \$ 3,473,773       \$ 727,048       \$ 1,711,931       \$ 413,557       \$ 296,985       \$ 1         \$ 5,919%       4,3209%       7.176%       8.379%       7.868%       6.706%       \$ 706%	Net Plan	t in Service	67	8,293,983			315,746	\$	902,547	63	2,092,738	4	496,507	63	348,598	69	137,847
\$ 6,732,863 \$ 3,473,773 \$ 727,048 \$ 1,711,931 \$ 413,557 \$ 296,985 \$ 1 5.919% 4.209% 7.176% 8.379% 7.868% 6.706%	Materials & Supplies - Fuel Materials & Supplies - Local Cash Working Capital Customer Advances & Depo Accumulated Deferred Incon	pplies - Fuel pplies - Local ances & Deposits eferred Incorne Taxes	<del>ω</del>	260,508 170,308 44,894 (19,448 (19,448 (2,017,382		Ĕ	96,853 108,482 20,303 (10,815) 056,796)	\$	25,033 19,556 4,590 (4,742) (219,937)	69	83,362 30,290 12,651 (3,617) (503,492)	67	26,092 5,016 3,564 (117,621		27,882 3 3,301 (125) (125)	-	1,287 6,961 485 (149 (149
5.919% 4.209% 7.176% 8.379% 7.868% 6.706%	Total Net Origi	nal Cost Rate Base	⇔	6,732,863			473,773	\$	727,048	ф	1,711,931	↔	413,557		296,985	\$	109,570
	Rate of Return			5.9199	*		4.209%		7.176%		8.379%		7.868%		6.706%		3.857%

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## Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative income Tax Calculation with Energy Efficiency Costs Removed

	LIGHTING (7)	35,745	273 551	824		140 91	4,039	1.706	251	476 280	1	2,713	14,342	755	2,574 156	17,827	24 2	4	285 146	6,285	12,164	84 598	305	13,151
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	LARGE TRANSMISSION (6)	298,033	12,077 24,388	36,465			ı		• •		•	1		•	1 1	•	I	. 1	1 1	ſ	1	<b>1</b> 1	*	t
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	LARGE <u>Primary</u> (5)	356,515	12,271 24,781	37,052		1,392 658	40,148	~	2,413	3,424		5,838	19	7,251	18,522	25,792	a	380	2,056	2,450	<u>1</u> 6	808 4.303		5,127
		69	s so	69		ფფ	44	49	• • •	\$	\$	\$	**	( <del>)</del>	<del></del> м м	\$	¢	<del>)</del> 49	<del></del> (у (у	\$	\$	69 67	0 IN	\$
	LARGE G.S./ SM PRIMARY (4)	1,404,561	47,321 95,562	142,883		5,889 3,846	169,902	309	10,205	20,003 8,639	,	39,156	2,600	30,674	108,219 4,813	146,306	1 052	1,635	12,015 4,489	19,192	2,205	3,420 25,139	9,333	40,157
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with Energy Efficiency Costs Removed (Dollars in Thousands)	SMALL GEN SERVICE (3)	525,577	16,424 33,168	49,593		2,159 1,410	62,274	4 405	3,742	7,334		19,802	37,045	11,247	39,681 2,407	90,380	15 OLS	599	4,406 2,245	22,266	31,419	1,254 9.218	4,697	46,589
insar N CC		•⁄} 62	64 AN 10 AD	4 43		γγ γγ	43			ფ. ფ იკი		\$÷ €3			കക ചെ	€≯ ©			6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6				- 01	ся С
<u>ollars in Tho</u>	RESIDENTIAL (2)	2,313,878	70,339 142,045	212,384		9,981 6,520	287,937	31,838				103,028			183,474 11,129	514,343		-				5,798 42.621		297,216
Liner Liner		ся сл	കക ഗഗ	\$* 0		9 49 9 49	ം റ			ათ ია ია		↔ ⊳			കഴി നഗി	↔ ~	4 0		8 69 8 69			3 2 2 2 3 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3		\$ 0
WITH	MISSOURI TOTAL (1)	4,934,309	158,705 320,495	479,200		19,560 12,525	564,299	36.26	33,913	65,148 33,215	. •	170,537	321,74	101,932	352,469 18,505	794,647	10 001	5,43	39,132 17,260	192,243	272,881	11,365 81.879	36,11	402,240
		÷	\$ \$	69		69 49	\$		\$	w w	ф	\$	64	69	60 GA	\$	ų	<b>\$</b> \$	\$\$ \$3	43	63	ରେ ସ	o vol	49
	ALLOCATION BASIS	A.F.1	A.F.2 A.F.3			A.F.8 A.F.5	A.F.8	A.F.4	A.F.5a	A.F.5b A.F.6	DIRECT		A.F.4	A.F.5a	A.F.5b A.F.6		V U V	A.F.5a	A.F.5b A.F.6		A.F.4	A.F.5a A.F.5b	A.F.6	
	NET ORIGINAL, COST - PAGE 1 ACCT# ITEM	PRODUCTION	<u>TRANSMISSION</u> LINES SUBSTATION	TOTAL TRANSMISSION	DISTRIBUTION PLANT	SUBSTATION LAND OTHER LAND	2 SUBSTATIONS	POLES TOWERS FIXTURES CUSTOMER	Ą	PRIMARY Secondary	LIGHTING-DIRECT	SUBTOTAL	OVERHEAD CONDUCTOR CUSTOMER	H	PRIMARY SECONDARY	SUBTOTAL	UNDERGROUND CONDUIT	HV	PRIMARY Secondary	SUBTOTAL	UNDERGROUND CONDUCTORS CUSTOMER	HV PRIMARY	SECONDARY	SUBTOTAL
	NET ORIC					360 321	361-362	364					365				366				367			
	TITLE: <u>Ne</u> LINE# A	<del>ب</del> ر	N 60 4 10 6	o ~ 0	0 00 <del>(</del>	5268		5 8 ¢	38	6 20	22	888	\$ 52	27	8 8	8 2 8		8	36 37	888	<del>3</del> 4 4	<b>4</b> 4	: <del>1</del> 2 4	<del>8</del> 4

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## Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income "ax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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TITLE: NET ORIGINAL COST - PAGE 2	14						114143						Ļ	
	3	ALLUCA I IUN BASIS		MISSOURI TOTAL (1)	RESIL	RESIDENTIAL (2)	SMALL GEN SERVICE (3)		LARGE G.S./ <u>SM PRIMARY</u> (4)		LARGE <u>PRIMARY</u> (5)	LARGE TRANSMISSION (6)	(GE VISSION	LIGHTING (7)
LINE TRANSFORMERS CUSTOMER SECONDARY		A.F.15 A.F.6	s s	162,193 122,013	રુ છે	141,274 73,379	\$ 15, 15,	19,547 \$ 15,870 \$	1,372 31,734	<del></del> м м	t 1	<del>ن</del> ه به		\$ 5 1,029
SUBTOTAL			49	284,206	ф	214,653	\$ 35'	35,418 \$	33,106	⇔	,	\$	1	\$ 1,029
OVERHEAD SERVICES CUSTOMER SECONDARY		A.F.15 A.F.16	<del>с,</del> с,	(18,307) (26,619)	<del>69</del> 69	(15,945) (18,499)	<del>ся ся</del>	(2,206) \$ (3,432) \$	(155) (4,688)	69 49	1 1	თთ	• •	69 69
SUBTOTAL			ŝ	(44,926)	¢	(34,444)	\$ (5,6	(5,639) \$	(4,843)	⇔	ı	69	•	\$
UNDERGROUND SERVICES CUSTOMER SECONDARY		A.F.15 A.F.16	ທທ	40,156 2,302	\$	34,977 1,600	↔ ↔ 24	4,840 \$ 297 \$	340 405	<del></del>		69 49	1 1	<del>6</del> 69
SUBTOTAL			S	42,458	<del>v</del> 3	36,576	ۍ ب	5,136 \$	745	ŝ	,	\$9	•	69
		A.F.7	ŝ	63,982	\$	41,849	\$ 12,9	12,938 \$	8,430	ŝ	662	\$9	46	\$
CUSTOMER INSTALLATIONS		DIRECT	\$	හ	69	1	↔	49 1	8	÷	0	\$	1	
STREET LIGHTING		A.F.29	63	49,887	ŝ	F	\$	ю 1	ŀ	\$	•	\$	•	\$ 49,887
SUBTOTAL - CUSTOMER DIST PLANT - DEMAND DIST PLANT	ANT		<del>ທ</del> ທ	1,011,326 1,540,338	ss ss	837,333 782,375	\$ 123,004 \$ 169,728	004 \$ 728 \$	16,154 445,735	မာမာ	706 81 <sub>1</sub> 364	\$ \$	<del>4</del> ,	\$ 34,083 \$ 61,137
DISTRIBUTION TOTAL			÷	2,551,664	w	1,619,707	\$ 292,732	732 \$	461,890	\$	82,070	ŝ	46	\$ 95,220
GENERAL PLANT		A.F.35	<b>\$</b> ⊅	281,976	63	145,595	\$ 29,7	29,711 \$	71,526	49	17,898	63	12,052 \$	\$ 5,195
			÷	ı	↔	,	\$	69 1	r	49	T	¢	1	\$
			\$	7	\$	T	\$	رمی ا	•	\$	•	\$	-	69
SUBTOTAL PROD, T&D, GEN, COMMON PLANT	d NOM	LANT	\$	8,247,150	\$	4,291,564	\$ 897,613	613 \$	2,080,858	49	493,535	¢	346,596	\$ 136,984
INTANGIBLE PLANT EE REGULATORY ASSET REGULATORY ACCOUNT (PENSION /	7 NOI	EE tab A.F.35	<b>ଜ ଜ</b> ଜ	48,191 (1,358)	\$	24,883	(, ''') د ک	5,078. \$ (143) \$	12,224 	6 6 6 6	3,059 	<b>69 69 69</b>	2,060	888 - 888 - (52)
TOTAL NET PLANT			ю	8,293,983	÷	4,315,746	\$ 902,547	547 \$	2,092,738	43	496,507	\$	343,598	\$ 137,847

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## Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

	(7)	1.287	6,961	485	(149)	(36,862)	109,570
	LARGE I <u>RANSMISSION</u> 1 (6)	27,382 \$	с С	3,301 \$	(125) \$	(82,674) \$	296,985 \$
	LAKGE <u>PRIMARY</u> TRAI (5)	26,092 \$	5,016 \$	3,564 \$	• •	(117,621) \$	413,557 \$
-	내	⇔	⇔	\$	\$	\$	ю
	M PRIMARY	83,362	30,290	12,651	(3,617)	(503,492)	1,711,931
		25,033 \$	19,556 \$	4,590 \$	(4,742) \$	(219,937) \$	727,048 \$
	3	↔ ~	↔ ^\	\$	\$	*	\$
	RESIDENTIAL (2)	36,853	108,482	20,303	(10,815	(1,056,796	3,473,773 \$
		260,508 \$	170,303 \$	44,894 \$	(19,448) \$	(2,017,383) \$	6,732,863 \$
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	BASIS	A.F.11	A.F.18	A.F.37	A.F.12	A.F.19	Ш
TITLE: NET ORIGINAL COST - PAGE 3	<u>сст</u> # <u>ПтЕМ</u>	MATERIALS & SUPPLIES - FUEL		CASH WORKING CAPITAL	CUSTOMER ADVANCES & DEPOSITS	ACCUM DEFERRED INCOME TAXES	TOTAL NET ORIGINAL COST RATE BASE
<u>TITLE: NE</u>	LINE# ACCT#	-	61	ო	4	ათ	7

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### Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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VAAMAR MS/.S	OTHER	<u>5</u>												
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ARGF G.	LABOR	0	55,921			•	- 0	1,784		~	4 (t) - 1	<i>•</i>		
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	1	-	366,232	948,195 1,314,430	• •	,	5,436 46,871	52,406		4,254	521 521 96	3,527	1,812	3,175
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ALLOCATION	BASIS		A.F.1/EE	E	A.F.11 A.F.2		A.F.2 A.F.3	10		A.F.8	A.F.22 A.F.230 A.F.236 A.F.23		A.F.20 A.F.21	
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					121			TOTAL TRANSMISSION EXPENSES	DISTRIBUTION OPERATING EXPENSES				Rs	
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<u>OPERATING EXPENSES - PAGE 1</u>	撒	빙	ង		λ3		Ħ		ä				583-2 OVERHEAD TRANSFORMERS CUSTOMER SECONDARY	
	ACCT #									582	583-1		283	
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### Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs. Removed (Dollars in Thousands)

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### Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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### Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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TITLE: OPERATING EXPENSES - PAGE 5

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### Electric Cost of Service Allocation Study at Present Rates Includes MIEC Classification Adjustments and MIEC's Alternative Income Tax Calculation with Energy Efficiency Costs Removed (Dollars in Thousands)

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III.E. OPERATIN LINE # ACCT #	IS EXPENSES - PAGE 9	ALLOCATION		LABOR (1)	10IAL DIAL	TAL MISSOURI OTHER (2)	TOTAL (3)	RES LABOR	RESIDENTIA	DAL CITHER (5)	SMALL LABOR	B GEN	SMALL GEN SERVICE LABOR OTHER (6) (7)	LARGE G LABOR (8)	o NS/S	ARGE <u>G. S./SM PRIMARY</u> L <u>ABOR</u> OTHER (8)	LARC LABOR	E PRI	MARY J OTHER J (11)	ARGE TRANSMISSION LABOR OTHER (12) (13)	(13) ISMISSION	LIGH LABOR (14)	IGHTING R <u>OTHER</u> (15)
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6,124 917 2,597 183 9,310 425 \$ 8,741 \$ 12,515 \$ 35,401 8,741 ф ц, .| , 6,398 5 ŝ \*\*\*\* s 49 ~ ~ ~ 43 5,826 5,680 5,680 25,233 1,278 2 2,127 17,341 ۰l 17,341 37,736 180,046 13,933 6 6 6 M ÷ \$ \$ •• \$ 69 ₩ 14,841 J , . 1 \$ 0.00 \$ ~~~~~ \$ 2 -1,288 4,413 3,159 8,288 10,879 35,138 1,463 25,538 · 25,538 55,763 210,208 16,667 69 ..... 63 49 \$ \$ \$ (A) (A) (A) 22,040 ŀ 49 ام د، د 00 00 00 I <del>()</del> <del>69</del> 49 35,478 50,405 145,453 5,845 784,887 5,008 26,648 12,626 109,943 109,943 237,181 ł 65,601 14 69 ÷ \$ •> \$ \$ \$ \$ 88,079 . . . . , 69 w, w 60 60 60 t) ŝ v) 6 43 4A ŵ 24,570 1,738 17,205 5,245 48,758 48,758 15,498 16,036 61,773 2,428 95,735 302,326 . 5 49 ŝ 69 36,587 . . ı <del>(</del>9 49 \$ **i**9 ₩ 9 49 49 49 -أمودهما 7,445 95,440 25,701 74,466 13,330 285,148 11,897 236,756 236,756 394,841 108,170 -\$ 1,312,278 5 \$ 49 -179,290 . ¢4 ÷ 00 00 00 49 ŝ ÷+ ++ ₩ 16,797 149,832 49,775 142,152 96,527 572,055 23,042 823,776 447,077 447,077 . 3,182,381 230,672 142,152 \$ 96,527 \$ 572,055 \$ 23,042 \$ 23,042 \$ ⇔ 833,776 \$ 230,672 \$ 2,835,147 \$ ↔ *•*4 16,797 149,832 49,775 447,077 447,077 • 63 ø \$ 63 h، م -60 KN 347,234 . . .] . . . . , , 69 \*\*\*\* ŝ ••••• 69 69 A.F.18 A.F.29 A.F.29 A.F.35 A.F.35 A.F.1 A.F.1 A.F.17 A.F.18 A.F.35 TOTAL OPERATING & OTHER EXPENSES TOTAL DEPREC & AMORTIZ EXPENSES DEPREC & AMORTIZATION EXPENSES REAL ESTATE & PROPERTY TAXES / INCOMECTY EARNINGS TAXES / RETURN PAYROLL TAXES ENVIRONMENTAL TAX DEPR-PRODUCTION PLANT DEPR-COMMON PLANT DEPR-TRANSMISSION PLANT DEPR-DISTRIBUTION PLANT DEPR-DISTRIBUTION PLANT DEPR-GENERAL PLANT SUBTOTAL SUBTOTAL OTHER 4500~80mmにつけたちのでのないながののないので、

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Schedule MEB-COS-SUR-1 Attachment Page 8 of 8

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TOTAL COST OF SERVICE

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### Class Cost of Service Study Results and Revenue Adjustments to Move Each Class to Cost of Service Using MIEC's Modified ECOS at Present Rates with Energy Efficiency Costs Removed

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				Adjusted						
Line	Rate Class	Base Revenues	Current Rate Base	Operating Income	Earned ROR	Indexed ROR	Income @ Equal ROR	Difference in Income	Revenue Increase	Percent Increase
		(1)	(2)	6)	(4)	(5)	(9)	6	(8)	(6)
	Residential	\$ 1,170,105	\$3,473,773	\$ 146,222	4.209%	17	\$ 205,612	\$ 59,391	\$ 95,863	8.2%
	Small Gen. Service	288,054	727,048	52,174	7.176%	121	43,034	(9,140)	(14,753)	-5.1%
	Large G.S. / Sm Primary	749,850	1,711,931	143,441	8.379%	142	101,329	(42,112)	(67,974)	-9.1%
	Large Primary	189,820	413,557	32,539	7.868%	133	24,478	(8,061)	(13,011)	-6.9%
	Large Transmission	147,949	296,985	19,915	6.706%	113	17,579	(2,337)	(3,772)	-2.5%
	Lighting	34,380	109,570	4,226	3.857%	65	6,485	2,259	3,647	10.6%
	Total	\$ 2,580,158	\$6,732,863	\$ 398,518	5.919%	100	\$ 398,518	י •	ĭ ↔	0.0%

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Schedule MEB-COS-SUR-2

### **Cost-Effectiveness Test Summary**

MEEIA Implementation	anan da kana takut da mangan.			and the second
Plan 2013-2015	TRC	UCT	РСТ	RIM
RES-Lighting	3.66	6.01	10.18	0.56
RES-Efficient Products	1.55	3.90	2.85	0.62
RES-HVAC	2.11	4.61	2.63	0.94
RES-Refrigerator Recycling	2.23	2.93	11.67	0.63
RES-HEP	1.64	3.00	3.11	0.68
RES-New Homes	1.26	1.77	3.61	0.57
RES-Low Income	0.84	0.84	2.85	0.43
RES-TOTAL	2.24	4.00	4.52	0.68
Bus-Standard	2.14	3.15	4.10	0.75
BUS-Custom	1.77	3.55	2.62	0.82
BUS-RCx	1.70	3.77	2.51	0.79
BUS-New Construction	1.36	2.22	2.42	0.71
BUS-TOTAL	1.85	3.33	2.98	0.79
PORTFOLIO TOTAL	2.07	3.71	3.86	0.72

Note: Data in table reflects cost-based values calculated using DSMore.

Source: Ameren Missouri MEEIA Report, Page 43.

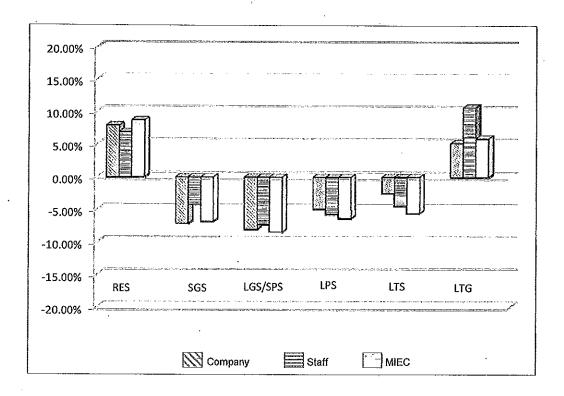
Schedule MEB-COS-SUR-3

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### AMEREN MISSOURI

### Comparison of the Class Cost of Service Results Percent Change in Class Revenues Required to Equalize Rate of Return at Present Rates (Revenue Neutral)

LINE NO.	DESCRIPTION		SGS (2)	LGS/SPS (3)	<u>LPS</u> (4)	LTS (5)	LTG (6)
1	Company	7.83%	-7.13%	-7.99%	-4.88%	-2.49%	5.22%
2	Staff	6.81%	-4.20%	-7.28%	-5.73%	-4.43%	10.67%
3	MIEC	8.63%	-6.78%	-8.45%	-6.31%	-5.54%	5.87%



Sources:

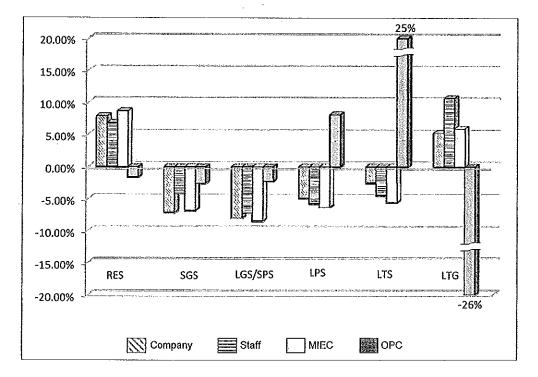
Company: Ameren's ECOS study modified to reflect income taxes at present rates; Schedule MEB-COS-6. Staff: Workpaper "Staff CCOS - Ameren Missouri.xlsx", tab "Table 2".

MIEC: Schedule MEB-COS-5

### **AMEREN MISSOURI**

### Comparison of the Class Cost of Service Results Percent Change in Class Revenues Required to Equalize Rate of Return at Present Rates (Revenue Neutral)

LINE NO.	DESCRIPTION	RES (1)	SGS (2)	LGS/SPS (3)	LPS (4)	LTS (5)	<u>LTG</u> (6)
1	Company	7.83%	-7.13%	-7.99%	-4.88%	-2.49%	5.22%
2	Staff	6.81%	-4.20%	-7.28%	-5.73%	-4.43%	10.67%
3	MIEC	8.63%	-6.78%	-8.45%	-6.31%	-5.54%	5.87%
4	OPC	-1.62%	-2.58%	-2.27%	8.09%	24.99%	-25.72%



Sources:

**Company**: Ameren's ECOS study modified to reflect income taxes at present rates; Schedule MEB-COS-6.

Staff: Workpaper "Staff CCOS - Ameren Missouri.xisx", tab "Table 2".

MIEC: Schedule MEB-COS-5

OPC: Workpaper "RevisedwS A&4CP BAM WP CCOS w CC ER-2012-0166-HC.xlsx",

tab "Schedule BAM Direct-1", Row 39.