

**Exhibit No.:**

**Issue(s):**

**Witness/Type of Exhibit:**

**Sponsoring Party:**

**Case No.:**

\_\_\_\_\_  
Class Cost of Service/  
Rate Design

Meisenheimer/Rebuttal

Public Counsel

ER-2012-0345

**REBUTTAL TESTIMONY**

**OF**

**BARBARA A. MEISENHEIMER**

Submitted on Behalf of the Office of the Public Counsel

**Empire District Electric Company**

**Rate Design**

CASE NO. ER-2012-0345

January 16, 2013

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

In the Matter of The Empire District            )  
Electric Company of Joplin, Missouri            )  
Tariffs Increasing Rates for Electric            )       **ER-2012-0345**  
Service Provided to Customers in the            )  
Missouri Service Area of the Company         )

**AFFIDAVIT OF BARBARA A. MEISENHEIMER**

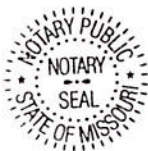
**STATE OF MISSOURI**    )  
                                  )    ss  
**COUNTY OF COLE**     )

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

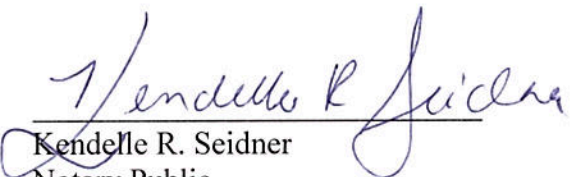
1. My name is Barbara A. Meisenheimer. I am Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
**Barbara A. Meisenheimer**

Subscribed and sworn to me this 16th day of January 2013.



**KENDELLE R. SEIDNER**  
My Commission Expires  
February 4, 2015  
Cole County  
Commission #11004782

  
\_\_\_\_\_  
**Kendelle R. Seidner**  
Notary Public

My Commission expires February 4, 2015.

**Rebuttal Testimony  
Of  
Barbara Meisenheimer**

**Empire District Electric**

**ER-2012-0345**

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

2 A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel,  
3 P. O. 2230, Jefferson City, Missouri 65102. I am also an adjunct instructor for  
4 William Woods University.

5 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?**

6 A. Yes. I filed direct testimony on November 30, 2012.

7 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

8 A. My rebuttal testimony responds to portions of the rebuttal testimony of the Missouri  
9 Public Service Staff witness Michael Scheperle and Empire District Electric (Empire  
10 or the Company) witness Aaron Doll on the issues of class cost of service and rate  
11 design.

12 **Q. WHAT IS THE COMPANY'S RATE DESIGN PROPOSAL FOR THE RESIDENTIAL**  
13 **CLASS?**

14 A. Company witness Mr. Doll proposes an equal percentage increase to all classes.  
15 Public Counsel agrees with this aspect of his rate design proposal. However, within

1 the residential service (RG) and commercial service (CB) classes he proposes to  
2 disproportionately increase the customer charge. Specifically, he proposes a 15.2%  
3 increase in the customer charge for each of these classes with the remaining 6.76%  
4 for RG and 6.66% for CB recovered through equal percentage increases on  
5 volumetric rate elements. As filed in direct, this results in a Company proposal to  
6 raise the RG customer charge from \$12.52 to \$14.42 and the CB customer charge  
7 from \$20.00 to \$23.04. Public Counsel strongly opposes any increase in the RG or  
8 CB customer charge and recommends that any increase be recovered through an  
9 equal percentage increase on volumetric rate elements.

10 **Q. DID THE COMPANY PREPARE A CLASS COST OF SERVICE STUDY FOR THIS CASE?**

11 A. No. The Company's support for a disproportionate increase in the customer charge  
12 is based on the class cost of service study filed in the last case by H. Edwin  
13 Overcast, a witness not testifying in this case.

14 **Q. HAS ANY COMPANY WITNESS ADOPTED MR. OVERCAST'S TESTIMONY FOR**  
15 **PURPOSES OF THIS CASE OR OFFERED ALTERNATIVE COST SUPPORT FOR THE**  
16 **PROPOSED DISPROPORTIONATE INCREASE IN THE RG OR CB CUSTOMER**  
17 **CHARGE?**

18 A. No.

19 **Q. DO YOU AGREE WITH THE CUSTOMER CHARGE COST RESULTS FROM MR.**  
20 **OVERCAST'S OLD CLASS COST OF SERVICE STUDY?**

21 A. No. In my testimony in the previous case ER-2011-0004, I explained that the  
22 Company's excess allocation of distribution costs as customer related resulted in

1 substantially higher costs than appropriately recovered in a customer charge.  
2 Based on my review of costs in that case, and the lack of updated information in  
3 this case, I do not believe an increase in the customer charge is supported on a  
4 cost basis.

5 To the extent that the Commission does consider the cost basis for  
6 potential changes to the customer charge, the customer charge calculation should  
7 include only costs related to services, meters and customer accounts expenses  
8 such as the return on rate base for the relevant plant accounts, distribution  
9 operation and maintenance expenses associated with services, and meters, plus the  
10 depreciation expense, payroll benefits, and property taxes associated with services  
11 and meters. Page 20 of the NARUC Manual defines customer related cost as  
12 costs directly related to the number of customers. I believe the costs associated  
13 with Accounts 369 (Service) and 370 (Meters) reasonably satisfy this definition  
14 and should be treated as customer related. However, the distribution costs in  
15 Accounts 364-368 do not reasonably satisfy this definition. Many of the  
16 distribution costs associated with providing service to electric utility customers  
17 are not directly associated with or reasonably assignable to a particular class with  
18 precision. For example, with the exception of service drops and meters, most of  
19 the facilities between the utility customer's point-of-service and the distribution  
20 substation are shared facilities. Since no portion of such facilities is directly  
21 related to the number of customers, the associated costs are best classified as  
22 demand related, rather than customer related. When a new customer premise is  
23 connected to the system, customer density may change but the system may not  
24 need any new poles, conduits, conductors or transformers to serve the customer.

1 In other words, unlike meters that increase directly with the number of customers,  
2 the addition of a new customer will not necessarily cause new or proportional  
3 investment in poles, conduits, conductors or even transformers. Second, the more  
4 removed facilities are from the customer the more diverse they are likely to be in  
5 serving the demand of different customers and the less appropriate it is to  
6 characterize the associated cost as customer related.

7 **Q. IN ADDITION TO EXCESSIVELY ALLOCATING DISTRIBUTION PLANT ACCOUNTS AS**  
8 **CUSTOMER RELATED DO YOU DISAGREE WITH OTHER ASPECTS OF THE COMPANY'S**  
9 **OLD CUSTOMER COST CALCULATION?**

10 A. Yes. The distribution costs in Mr. Overcast's study were also disproportionately  
11 assigned to residential and small commercial customers because the Company  
12 allocated customer related costs on the basis of unweighted customer numbers. The  
13 Company allocates the customer portion of poles, overhead and underground  
14 conductors and conduit in a manner that results in each residential customer being  
15 allocated the same customer related cost as a large industrial customer even though  
16 the large industrial customer likely is served by poles that span a larger lot or can  
17 sustain heavier lines and by higher capacity conductors. This customer allocation  
18 too heavily assigns costs to small low use customers.

19 **Q. IS EMPIRE'S PROPOSED CUSTOMER CHARGE REASONABLE?**

20 A. No. The Company has not presented cost evidence in this case that supports its  
21 proposal to increase the customer charge. In addition to imposing an unavoidable  
22 additional burden on consumers during tough economic times, the customer charge  
23 should not be increased because doing so diminishes conservation incentives,

1 discourages subscription and disproportionately impacts certain customer groups  
2 including low use and low-income households. To the extent that the company  
3 seeks to recover demand related costs through the customer charge, a higher  
4 customer charge would also be unfair to residential customers that use gas heat.  
5 While from Empire's perspective a higher customer charge may be desirable in  
6 ensuring a steady stream of revenue, high customer charges are not the norm in  
7 competitive markets and are not necessary to achieve an efficient allocation or  
8 distribution of resources. To the contrary, relatively higher customer charges  
9 diminish the price signal that encourages energy conservation leading to unnecessary  
10 additional generation.

11 **Q. DO CUSTOMERS GENERALLY PERCEIVE HIGHER CUSTOMER CHARGES AS A**  
12 **BENEFIT?**

13 A. No. In my experience, customers do not consider higher customer charges as fair or  
14 beneficial. It is generally accepted that those who use more should pay more.  
15 Keeping customer charges low provides customers a less prohibitive price for being  
16 on the system and promotes greater economies of scale and more ubiquitous service.

17 **Q. PLEASE COMMENT ON THE STRAIGHT FIXED VARIABLE RATE DESIGN DISCUSSION**  
18 **INCLUDED ON PAGE 12 OF MR. DOLL'S DIRECT TESTIMONY.**

19 A. Public Counsel opposes implementing a straight fixed variable (SFV) rate design  
20 for many reasons. Public Counsel strongly opposed the Commission's decision to  
21 implement a SFV rate design for the Atmos and MGE gas distribution rates based  
22 on evidence that a SFV rate design was not cost based because a large portion of

1 costs are demand related costs and appropriately recovered through volumetric  
2 rates. Application of a SFV method in designing electric rates is even more  
3 inappropriate for designing electric rates since in addition to distribution costs, an  
4 electric company generally controls the cost of production and transmission.

5 A SFV rate design will also likely have tremendously differing impacts on  
6 customers based on electric use. Mr. Doll has not attempted to quantify these  
7 customer impacts. He has not provided evidence of the impact on low use or low  
8 income households. He has not explained why it would be fair for a customer that  
9 heats with gas instead of electric to pay the same bill as a customer that heats with  
10 electric, especially given that Empire experiences significant winter peak usage.

11 **Q. WHAT IS YOUR RECOMMENDATION REGARDING CONSIDERATION OF A STRAIGHT**  
12 **FIXED VARIABLE RATE DESIGN?**

13 A. Empire is not recommending a SFV rate design in this case and has not provided  
14 information sufficient to support such a recommendation. The Commission  
15 should disregard Mr. Doll's testimony on a SFV rate design.

16 **Q. WHAT IS THE STAFF'S RATE DESIGN PROPOSAL FOR THE RESIDENTIAL CLASS?**

17 A. Staff witness Mr. Sheperle proposes a disproportionate increase in Residential class  
18 revenues of .5% on a revenue neutral basis and an increase in the minimum  
19 monthly charge. In direct testimony he states;

20 Staff recommends adjustments be made first on a companywide  
21 revenue- neutral basis to the residential class, commercial building  
22 class and general power class. The Empire residential class should  
23 receive a positive 0.5% adjustment. The Empire commercial building  
24 class and general power class should receive a negative adjustment  
25 of approximately 0.82%. All other classes should receive the system



1 average increase (commercial space heating, special transmission:  
2 Praxair, total electric building, feed mill and grain elevator, large  
3 power, lighting and miscellaneous).

4 After having made the recommended revenue-neutral adjustments  
5 above, any overall change in revenues ordered by the Commission  
6 should be applied on an equal percentage basis to all classes. Staff  
7 further recommends that an additional constraint (revenue  
8 requirement after true-up) be placed on which class revenues are  
9 moved towards class cost-of-service to ensure no class receives an  
10 overall reduction in its rate revenues while another customer classes  
11 receives an overall increase in its rate revenues.

12 That the residential customer charge be increased to \$13.25.

13

14 **Q. DID STAFF PREPARE A CLASS COST OF SERVICE STUDY IN THIS CASE?**

15 A. Staff did prepare a class cost of service study but based on my review of that study I  
16 do not believe the results of the study should be relied upon in establishing rates in  
17 this case. In recent cases, Public Counsel has not objected to Staff's allocation  
18 methods for certain key accounts including production, transmission, distribution  
19 poles and conductors and certain customer service accounts. However, since the  
20 Company did not prepare a study for this case so much of the data and many of  
21 allocators the Staff had available to use in its study are outdated, unreliable and  
22 prepared by an expert witness previously employed by the Company that has not  
23 filed testimony in this case. Additionally, for certain key accounts the Staff has used  
24 significantly different allocations than those it has used in previous cases but has not  
25 fully explained why those allocation methods are appropriate for use in this case.  
26 For example, the Staff has changed how it allocates production, transmission, poles  
27 and conductors and certain customer service accounts. The changes result in  
28 allocators that assign higher costs to the residential and small commercial classes

1 compared to the allocations the staff utilized in past cases, including among others,  
2 Empire's most recent rate case.

3 **Q. WHAT ARE YOUR PRIMARY CONCERNS WITH THE STAFF'S CLASS COST OF**  
4 **SERVICE STUDY?**

5 A. The first concern relates to Staff's use of a non-coincident peak rather than a  
6 coincident peak in allocating production costs within the Base Intermediate Peak  
7 Allocation method. Public Counsel generally agrees that the BIP method is a  
8 reasonable method of allocating production related costs, however, the use of a  
9 NCP rather than CP is not appropriate and results in the over assignment of costs  
10 to residential and small commercial customer classes. The example of a common  
11 BIP method illustrated on pages 60-63, of the NARUC Manual uses a coincident  
12 peak in assigning costs. In the past the Staff has also used a measure of CP in the  
13 calculation. Use of a coincident peak appropriately recognizes that the production  
14 facilities are shared facilities and allocates actual shared system costs to classes in  
15 proportion to each classes demand at the actual system peak. Non Coincident  
16 peak on the other hand is an artificial construct that is not designed to reflect  
17 actual shared system use. Instead it is simply the sum of each class's peak  
18 demand whenever it occurs in a particular month. When used to allocate peak  
19 costs net of average costs, residential and small commercial classes tend to  
20 receive a higher proportion of costs under NCP than CP because of their demand  
21 volatility thereby diminishing the share they receive of the cost saving associated  
22 with a shared system. Since the BIP method isolates and assigns peak system  
23 costs separately from the base and intermediate costs, it is abundantly fair that

1 classes which receive some peak allocation receive it in fair proportion so the CP  
2 is the preferable measure.

3 It appears that the Staff used a NCP measure in this case to reflect that  
4 some customers might not receive a fair allocation of costs if they had reduced or  
5 no demand during the coincident peak period. I do agree that free ridership could  
6 be a problem if the test year coincident peak does not reflect a normally  
7 anticipated distribution of class contributions to the peak demand measure.  
8 However, using a NCP in the calculation is not the best remedy for the difficulty  
9 with the Staff's traditional use of a CP in the calculation. If the Commission  
10 decides that costs must be examined in this case then given that Empire's system  
11 is characterized by both summer and winter peaks and has many months for  
12 which demand nears system peak, I believe the use of each class's average use  
13 during the 12 monthly coincident peaks (12CP) would be a reasonable alternative  
14 method of allocating production costs. A 12CP would diminish the potential free  
15 rider problem associated with using a CP in the BIP method in this case. Use of  
16 12CP would reflect a somewhat reduced allocation to classes that actually  
17 experienced interruption during a test year system peak but also reflects that  
18 generally all classes' unrestricted demand is served during peak periods.

19 **Q. WHAT IS ANOTHER OF YOUR CONCERNS WITH THE STAFF'S CLASS COST OF**  
20 **SERVICE STUDY?**

21 **A.** My second concern also relates to the Staff's allocation of Transmission cost  
22 based on 12NCP. In past cases consistent with the example on page 79, of the  
23 NARUC manual the Staff used a 12CP to allocate transmission related costs. NCP

1 does not properly reflect the high level of diversity that exists at the transmission  
2 level.

3 **Q. WHAT IS ANOTHER OF YOUR CONCERNS WITH THE STAFF'S CLASS COST OF**  
4 **SERVICE STUDY?**

5 A. My third concern is that the Staff appears to have changed the method of  
6 allocation for the secondary portion of certain distribution accounts in a manner  
7 that assigns a larger proportion of costs to residential and small commercial  
8 customers. For example, in the last Empire case, Staff allocated the secondary  
9 demand portion of Account 364 (Poles, Towers, and Fixtures) and Account 365  
10 (Overhead Conductors and Devices) based on NCP. In this case the Staff has  
11 allocated the same costs on a weighted allocator which reflects NCP and  
12 maximum daily demand (MDD). The results allocate about 4% more of these  
13 costs to the RG class. Staff changed the allocation of Account 368 (Line  
14 Transformers) in a similar manner resulting in a similar increase in the share of  
15 costs allocated to the RG class. It is unclear from the Staff testimony and CCOS  
16 Report why the Staff changed its method of allocation, why the chosen  
17 weightings are appropriate.

18 **Q. WHAT IS ANOTHER OF YOUR CONCERNS WITH THE STAFF'S CLASS COST OF**  
19 **SERVICE STUDY?**

20 A. My fourth concern is that the Staff appears to have changed the method of  
21 allocation for certain customer service related accounts. For example, Staff's  
22 allocation of Accounts 906-910 (Customer Service and Information Expenses)

1 increases the assignment of costs to RG from about 40% in the last case to about  
2 84% in this case. In the last case Staff allocated 0% of Accounts 911-916 Sales  
3 Expenses) to RG. In this case the allocation is about 84%. The reason for  
4 increasing these allocations so substantially is not addressed in the Staff's CCOS  
5 Report or testimony.

6 **Q. DO THE ISSUES YOU HAVE DISCUSSED HAVE THE POTENTIAL TO SIGNIFICANTLY**  
7 **IMPACT CLASS COST OF SERVICE STUDY RESULTS?**

8 A. Yes. The allocation of production, transmission, distribution poles, conductors  
9 and line transformers and customer service expenses can have a substantial  
10 impact on class cost of service study results.

11 **Q. BASED ON YOUR REVIEW OF THE CLASS COST OF SERVICE STUDY WHAT IS YOUR**  
12 **RECOMMENDATION REGARDING REVENUE NEUTRAL RATE ADJUSTMENTS OR**  
13 **INCREASES TO THE RESIDENTIAL AND SMALL COMMERCIAL CUSTOMER**  
14 **CHARGE?**

15 A. Based on the concerns discussed above and the age of the data available, I  
16 recommend that the Commission not make revenue neutral adjustments or  
17 changes to the RG or CB customer charge in this case based on the Staff class  
18 cost of service study. The Commission should direct the Company to prepare and  
19 submit a current class cost of service study and customer charge calculation with  
20 its filing in the next rate case.

21 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

22 A. Yes.