

Exhibit No.:

Issue(s):

Witness/Type of Exhibit:

Sponsoring Party:

Case No.:

Class Cost of Service/
Rate Design

Meisenheimer/Rebuttal

Public Counsel

ER-2011-0004

REBUTTAL TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of
the Office of the Public Counsel

Empire District Electric Company

Case No. ER-2011-0004

April 18, 2011

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

In the Matter of The Empire District)
Electric Company of Joplin, Missouri)
for Authority to File Tariffs Increasing)
Rates for Electric Service Provided to)
Customers in the Missouri Service Area)
of the Company.)

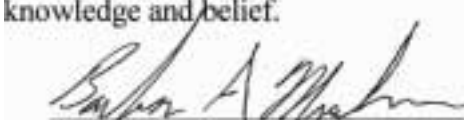
Case No. ER-2011-0004

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 a 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 affidavit are true and correct to the best of my **knowledge and belief.**



Barbara A. Meisenheimer

Subscribed and sworn to me this 18th day of April 2011.



Kendelle R. Seidner
Kendelle R. Seidner
Notary Public

My commission expires February 4, 2015.

**Rebuttal Testimony
Of
Barbara Meisenheimer**

Empire District Electric

ER-2011-0004

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 March 16, 2011.

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

8 A. My rebuttal testimony responds to portions of the rebuttal testimony of Empire
9 District Electric (Empire or the Company) witnesses H. Edwin Overcast and
10 William Gipson and Missouri Industrial Energy Consumers (MIEC) witness
11 Maurice Brubaker on the issues of class cost of service and rate design.

12 **Q. WHAT REASONS DOES THE COMPANY GIVE FOR REQUESTING A RATE INCREASE?**

13 A. Company witness Mr. Gipson states that the dominant factor driving the Company's
14 requested increase is the Iatan 2 investment and the increase in annual operating
15 costs associated with the unit.

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

3 A. Company witness Mr. Overcast proposes a disproportionate increase in Residential
4 class revenues as well as nearly doubling the minimum monthly charge from \$12.52
5 to \$25.00.

6 **Q. WOULD INCREASED PRODUCTION PLANT INVESTMENT OR ASSOCIATED**
7 **OPERATING COSTS TYPICALLY RESULT IN AN INCREASE IN COSTS RECOVERED**
8 **THROUGH THE CUSTOMER CHARGE?**

9 A. No. Production costs are typically classified as demand related or demand and
10 energy related and should be recovered on a volumetric basis. The Company
11 classified production costs as demand related so an increase in these costs should not
12 result in an increased customer charge.

13 **Q. WHAT THEN IS EMPIRE'S REASON FOR INCREASING THE CUSTOMER CHARGE SO**
14 **SUBSTANTIALLY?**

15 A. At Line 3, Page 28, Company witness Mr. Overcast recommends collecting demand
16 related costs in addition to customer related costs in the customer charge.

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

18 A. Absolutely not. This outcome is inconsistent with cost causative principles,
19 diminishes conservation incentive, discourages subscription and disproportionately
20 impacts certain customer groups including low use and low-income households.

1 The proposal to recover demand related costs through a higher monthly charge is
2 also unfair to residential customers that use gas heat.

3 **Q. MR. OVERCAST CLAIMS THAT A HIGHER CUSTOMER CHARGE IS EFFICIENT. DO YOU**
4 **AGREE?**

5 A. No. While from a utility's perspective a higher customer charge may be efficient 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. MR. OVERCAST CLAIMS THAT A HIGHER CUSTOMER CHARGE IS ACCEPTED BY**
12 **CUSTOMERS. DO YOU AGREE?**

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

17 The Commission may also recall that the current \$12.52 Residential
18 customer charge and \$17.67 Commercial Service and Small Heating Service
19 customer charge have only been in effect since September 10, 2010. An additional
20 increase in customer charges is unnecessary and unfair to customers.

1 **Q. MR. OVERCAST ATTEMPTS TO COMPARE EMPIRE'S PROPOSED CUSTOMER CHARGE**
2 **WITH THE CUSTOMER CHARGE OF ELECTRIC COOPERATIVES. SHOULD OTHER**
3 **FACTORS BE CONSIDERED IN THE COMPARISON?**

4 A. Yes. In addition to relevant differences in the principle agent relationship that exists
5 between Empire's and a cooperative's customers and management, there are also
6 differences in the characteristics of service. For example, Empire serves more than
7 twice the number of customers of any electric cooperative in the State of Missouri.
8 In addition, Empire's customer density is almost twice that of the largest electric
9 cooperative in Missouri. Cuivre River Electric Cooperative (Cuivre River or the
10 Cooperative)) is the largest electric cooperative serving approximately 59,000
11 customers in Lincoln, Pike, St. Charles and Warren counties. Cuivre River operates
12 5,255 miles of electric lines with a customer density of only 11.1 customer meters
13 per mile. Despite any scale economies that Empire may enjoy Cuivre River charges
14 a Customer Access charge of 50¢ per day which is far less than the Customer
15 Charge proposed by Empire. Another cooperative, Atchison-Holt Electric
16 Cooperative (Atchison-Holt) provides electric service to only 4,600 customers in
17 parts of Missouri, Iowa, and Nebraska. Atchison-Holt operates 1,200 miles of
18 distribution line, with a density of less than 4 customers per mile of line but charges
19 a monthly charge of \$13.50, less than \$1 more per month than Empire.

20 **Q. HAVE CONSUMERS EXPRESSED CONCERNS ABOUT THEIR ABILITY TO AFFORD**
21 **EMPIRE'S PROPOSED INCREASE?**

22 A. Yes. Customers testifying in the recent public hearings and customer comments
23 submitted to the Commission voice frustration and concern about the burden of an

1 additional rate increase given the current state of the economy. Some customers
2 commented that they must work extra hours or two jobs just to make ends meet.
3 Some commented that they must choose between paying utility bills and buying
4 food and medicine.

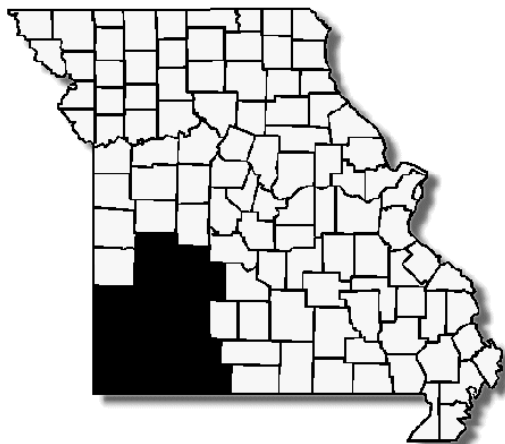
5 **Q. HAVE EMPIRE'S CUSTOMER'S FACED UNUSUAL ECONOMIC CHALLENGES IN RECENT**
6 **YEARS?**

7 A. Yes. In recent years, Empire's customers have faced significant economic
8 challenges. For example, every county in Empire's service area experienced an
9 increase in unemployment between 2006, and 2009. For a number of counties the
10 unemployment rate has more than doubled since 2006.

11 **Q. PLEASE DESCRIBE EMPIRE'S SERVICE AREA.**

12 A. According to information submitted as part of the Company's minimum filing
13 requirements, Empire serves portions of 16 counties in Southwest Missouri.

Counties Served by Empire



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1 **Q. PLEASE COMMENT ON THE RATE OF UNEMPLOYMENT IN EMPIRE’S SERVICE AREA.**

2 A. As illustrated below, according to the U.S. Bureau of Labor Statistics Quarterly
 3 Census of Employment and Wages, the unemployment rates in many of the counties
 4 served by Empire have increased substantially, in some cases, more than doubling,
 5 since 2006.

Unemployment Rate By County

County	2006	2007	2008	2009	Increase 2006-2009
Barry County	4.1%	4.8%	5.4%	8.3%	102.4%
Barton County	5.2%	8.6%	9.2%	10.8%	107.7%
Cedar County	5.1%	5.7%	6.5%	9.2%	80.4%
Christian County	3.7%	3.9%	5.0%	8.3%	124.3%
Dade County	4.7%	5.3%	6.2%	8.9%	89.4%
Dallas County	5.1%	5.2%	7.5%	11.5%	125.5%
Greene County	3.7%	4.0%	5.0%	8.3%	124.3%
Hickory County	6.9%	7.4%	9.6%	13.5%	95.7%
Jasper County	4.2%	4.5%	5.2%	8.3%	97.6%
Lawrence County	3.9%	4.0%	4.8%	8.4%	115.4%
Mc Donald County	3.9%	4.1%	4.9%	7.6%	94.9%
Newton County	4.5%	4.7%	5.5%	8.1%	80.0%
Polk County	4.4%	4.8%	6.0%	10.1%	129.5%
St. Clair County	5.6%	6.5%	7.0%	9.9%	76.8%
Stone County	6.6%	6.4%	7.8%	11.9%	80.3%
Taney County	6.9%	6.7%	7.7%	12.1%	75.4%

6
 7 **Q. PLEASE COMMENT ON RECENT RATE INCREASES THAT HAVE IMPACTED EMPIRE’S**
 8 **SERVICE AREA.**

9 A. From 2006 to 2010, investor owned utility customers in portions of Empire's service
 10 area have faced significant increases. In rate cases, Empire increased companywide

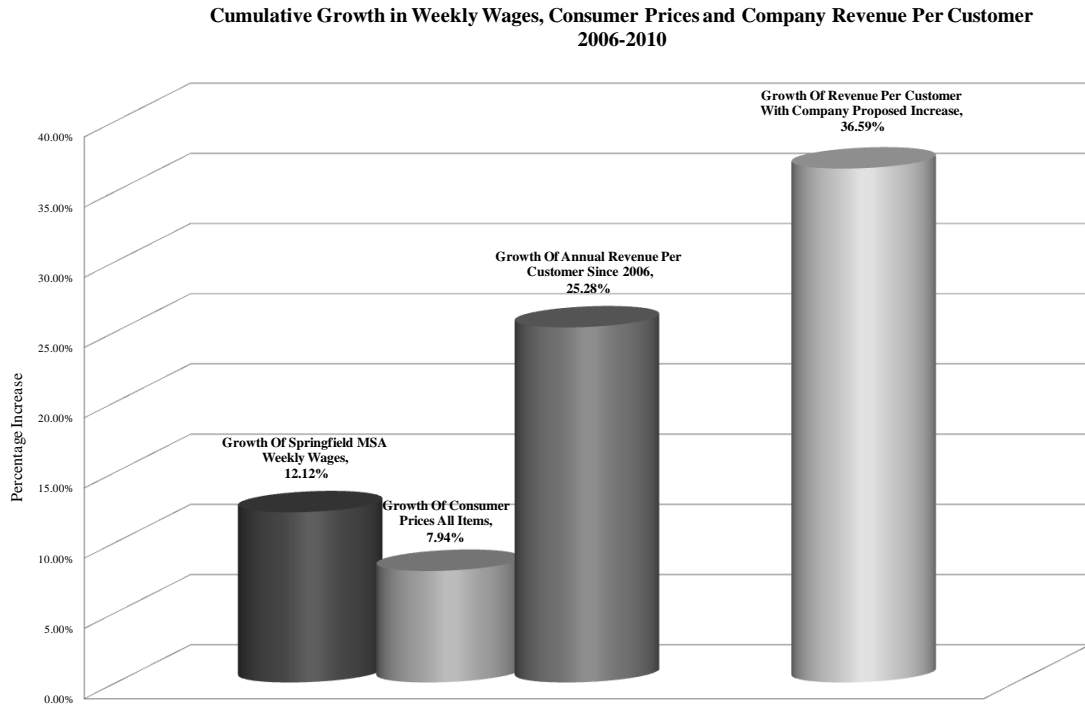
1 electric rates three times for a total of almost \$97M and increased natural gas
2 distribution rates by about \$2.6M. In addition, Empire sought and received approval
3 for a rate mechanism that has collected millions of dollars in additional electric fuel
4 cost recovery outside of the normal rate case proceedings. Missouri American
5 Water increased companywide water rates three times for a total of almost \$91M.
6 Missouri Gas Energy increased natural gas distribution rates twice for a total of
7 about \$43.4M. Missouri Gas Utility increased natural gas distribution rates over
8 \$300K.

9 **Q. PLEASE COMMENT ON WAGES AND PRICES.**

10 A. Based on data obtained from the US Bureau of Labor Statistics, between June 2006,
11 and June 2010, for counties served by Empire, the growth in average weekly wages
12 ranged from an increase of about 26.7% in Dallas County to a low of only 2.4% in
13 Hickory County.

14 **Q. HOW DOES THE GROWTH IN WAGES COMPARE TO THE GROWTH IN COMPANY**
15 **REVENUE?**

16 A. Overall, workers' weekly wages in the Springfield Missouri MSA have grown about
17 12.12% since 2006, which is less than half the 25.28% growth in Empire's revenue
18 per customer since 2006, and less than one third of the 36.59% growth in revenue
19 Empire could receive if the \$36.5M proposed increase is granted. The diagram
20 shown below illustrates these comparisons.



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The diagram illustrates a 12.12% increase in weekly wages for the period 2006-2010, while the increases granted in ER-2006-0315, ER-2008-0098 and ER-2010-0130, combined with the proposed increase in this case will equate to more than a 36.5% increase in revenue per customer for Empire's service area.

6

Q. WHAT DO YOU BELIEVE SHOULD BE THE COMMISSION'S FOCUS IN RESOLVING THIS CASE?

7

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A. In this case, Public Counsel urges the Commission to decide issues in a manner that recognizes the economic challenges faced by households in Empire's service area and reasonably minimizes the rate impact on consumers. The Commission should also focus on allowing customers greater control over their electric bills by rejecting any increase in the customer charge.

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1 **Q. WHAT ARE THE PRIMARY DIFFERENCES BETWEEN YOUR CCOS RESULTS AND**
2 **THOSE OF THE COMPANY AND MIEC?**

3 A. There are two main factors that contribute to the differences between my study
4 results and those of the Company and MIEC. The first is the classification of certain
5 distribution plant accounts as demand related or customer related. The second is the
6 method used to allocate production costs.

7 **Q. COULD YOU ELABORATE ON THE FIRST FACTOR?**

8 A. Yes. All the parties that prepared a CCOS study, including OPC, functionalized
9 distribution costs in Accounts 364 (Poles Towers and Fixtures), 365 (Overhead
10 Conductors & Devices), 366 (Underground Conduit), 367 (Underground Conductors
11 & Devices) and 368 (Line Transformers) in a manner that recognizes a distinction
12 between primary and secondary voltage. All parties, except OPC, then classified
13 these costs as having a customer related component as well as a demand related
14 component. I allocated these distribution accounts based only on demand.

15 **Q. WHY SHOULD THESE ACCOUNTS AND RELATED EXPENSES NOT BE CHARACTERIZED**
16 **AS CUSTOMER RELATED?**

17 A. Page 20 of the NARUC Manual defines customer related cost as costs directly
18 related to the number of customers. I allocated the costs associated with Accounts
19 369 (Service) and 370 (Meters) as customer related. However, the distribution costs
20 in Accounts 364-368 do not reasonably satisfy this definition. Many of the
21 distribution costs associated with providing service to electric utility customers are
22 not directly associated with or reasonably assignable to a particular class with

1 precision. For example, with the exception of service drops and meters, most of the
2 facilities between the utility customer's point-of-service and the distribution
3 substation are shared facilities. Since no portion of such facilities is directly related
4 to the number of customers, the associated costs are best classified as demand
5 related, rather than customer related. When a new customer is connected to the
6 system, both customer counts and customer density change but the system may not
7 need any new poles, conduits, conductors or transformers to serve the customer. In
8 other words, unlike meters that increase directly with the number of customers, the
9 addition of a new customer will not necessarily cause new investment in poles,
10 conduits, conductors or even transformers. Second, the more removed facilities are
11 from the customer the more flexible they are likely to be in serving the demand of
12 different customers and the less appropriate it is to characterize the associated cost as
13 customer related.

14 **Q. DO YOU SUPPORT THE COMPANY'S MINIMUM SYSTEM METHOD AS A REASONABLE**
15 **METHOD FOR CLASSIFYING A PORTION OF DISTRIBUTION COSTS AS CUSTOMER**
16 **RELATED?**

17 A. No. The method seeks to identify a portion of plant as customer related based on a
18 hypothetical minimum electric distribution system. To estimate a minimum system
19 cost, the existing quantity of each type of plant is multiplied by the minimum
20 replacement cost available for that type of plant. The sum of these minimum
21 replacement costs is divided by the replacement cost of the existing system to derive
22 the portion of costs assumed to be customer related.

1 As described above, the first obvious flaw in the minimum system method is
2 that it does not derive or prove a direct relationship between the number of
3 customers and the investment in the particular type of plant. A second flaw
4 associated with allocating distribution costs based on a minimum system method is
5 that even a minimum system includes shared and jointly used facilities that would be
6 more appropriately allocated on the basis of demand. However, the Company does
7 not allocate a portion of the minimum system based on demand. A third flaw
8 associated with allocating distribution costs based on a minimum system method is
9 that there is no assurance that the minimum system calculation based on replacement
10 costs is representative of the minimum system costs based on historic costs.

11 **Q. IN ADDITION TO ALLOCATING A PORTION OF CERTAIN PLANT COST ON A**
12 **CUSTOMER BASIS, ARE THERE OTHER REASONS YOU BELIEVE COMPANY'S**
13 **CLASS COST OF SERVICE STUDY UNFAIRLY ASSIGNS COSTS TO THE RESIDENTIAL**
14 **AND SMALL COMMERCIAL CLASSES?**

15 **A.** Yes. I believe the distribution costs are disproportionately assigned to residential
16 and small commercial customers because the Company allocates customer related
17 costs on the basis of unweighted customer numbers. The Company allocates the
18 customer portion of poles, overhead and underground conductors and conduit in a
19 manner that results in each residential customer being allocated the same customer
20 related cost as a large industrial customer even though the large industrial customer
21 likely is served by poles that span a larger lot or can sustain heavier lines and by
22 higher capacity conductors. This customer allocation too heavily assigns costs to
23 small low use customers.

1 **Q. YOU INDICATED THAT THE RESULTS OF THE PUBLIC COUNSEL, COMPANY AND MIEC**
2 **CCOS STUDIES ALSO DIFFER DUE TO THE CHOICE OF PRODUCTION ALLOCATOR.**
3 **WHAT IMPACT DOES THE METHOD OF ALLOCATING PRODUCTION AND**
4 **TRANSMISSION COSTS HAVE ON THE PARTIES' STUDY RESULTS?**

5 A. Differences in the method of allocating production and transmission plant is a
6 significant factor in explaining the difference in the parties' class cost of service
7 results. I allocated the production plant based on a time of use (TOU) allocator in
8 one study and on an A&5CP method in my second study. The Company and MIEC
9 chose to use variations of an Average and Excess (A&E) method. The Staff utilized
10 a Base Intermediate Peak allocator. I believe that conceptually the TOU method is
11 the most appropriate method in the allocation of production and transmission plant.

12 **Q. WHY DOES PUBLIC COUNSEL BELIEVE THAT A&E METHODS ARE NOT**
13 **APPROPRIATE FOR ALLOCATING PRODUCTION PLANT IN THIS CASE?**

14 A: A&E methods assign an excessive portion of costs based on only one or a few peak
15 hours of the year. Different types of electric production plant have different fixed
16 costs and variable costs. For example, base load plants tend to be large and
17 expensive-to-build machines that burn low cost fuels while peaking units are
18 generally inexpensive to build but have relatively high fuel costs. An electric utility
19 needs to plan its production facilities to minimize the total system cost given the
20 system load for the entire year. In other words, production cost is determined by the
21 optimal planning capacity mix of base load, intermediate and peaking capacities.
22 Many factors are considered in system planning, including the system utilization
23 around the year as well as the planned maintenance needs and risk of forced outages.

1 Therefore, it is inappropriate to attribute a large proportion of production cost to a
2 few hours when customers' usage peaks. Public Counsel's TOU allocator is superior
3 in that it assigns the cost of various production facilities to the customer classes
4 based on classes' use when those plants are actually generating electricity. For
5 example the cost of peaking plants which operate in only a small fraction of hours is
6 assigned to customers using electricity in peak hours while the cost of base load
7 plants which operate in the majority of hours of the years is assigned to customers
8 using electricity in those hours.

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

10 **A. Yes.**