Exhibit No.:Rate DesigIssue:Rate DesigWitness:Maurice BraType of Exhibit:Rebuttal TeSponsoring Party:Midwest ErCase No.:ER-2012-03Date Testimony Prepared:January 15

Rate Design Maurice Brubaker Rebuttal Testimony Midwest Energy Users' Association ER-2012-0345 January 15, 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 Service Provided to Customers in the Missouri Service Area of the Company

Case No. ER-2012-0345

Rebuttal Testimony and Schedule of

Maurice Brubaker

On behalf of

Midwest Energy Users' Association

January 15, 2013



Project 9669

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 Service Provided to Customers in the Missouri Service Area of the Company

Case No. ER-2012-0345

STATE OF MISSOURI

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 Midwest Energy Users' Association in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony and schedule, which were prepared in written form for introduction into evidence in the Missouri Public Commission Case No. ER-2012-0345.

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

Maurice Brubaker

Subscribed and sworn to before me this 14th day of January, 2013.



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Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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

Case No. ER-2012-0345

Rebuttal Testimony of Maurice Brubaker

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

- 2 A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
- 3 Chesterfield, MO 63017.

4 Q WHAT IS YOUR OCCUPATION?

- 5 A I am a consultant in the field of public utility regulation and President of Brubaker &
- 6 Associates, Inc., energy, economic and regulatory consultants.

7 Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

8 A This information is included in Appendix A to my testimony.

9 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

10 A This testimony is presented on behalf of the Midwest Energy Users' Association 11 ("MEUA"). These companies purchase substantial amounts of electricity from Empire 12 District Electric Company ("Empire" or "Company") and the outcome of this 13 proceeding will have an impact on their cost of electricity.

1 Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A My testimony responds to the direct testimony of Staff witness Michael Scheperle, and the Staff report on class cost of service and rate design. In particular, I address Mr. Scheperle's identified revenue requirement associated with energy efficiency ("EE") programs and how these costs should be recovered in the rate schedules in order to ensure that customers who have opted-out of the EE programs are not charged costs associated with these programs.

8 Q WHAT HAS MR. SCHEPERLE DETERMINED AS THE ESTIMATED REVENUE 9 REQUIREMENT ASSOCIATED WITH EE PROGRAMS?

A As shown in the Staff report and Mr. Scheperle's workpapers, he has identified a total
revenue requirement of approximately \$1.004 million associated with EE programs.
This amount is the current amortization of the previously capitalized program costs,
plus a return on the unamortized rate base value.

14 Q HOW DOES MR. SCHEPERLE PROPOSE TO COLLECT THE EE REVENUE

15 **REQUIREMENTS?**

A Mr. Scheperle divides the \$1.004 million EE revenue requirement by the estimated
number of kWh sales of customers who have <u>not</u> opted-out. This amounts to a
charge of \$0.029 per kWh that would be paid by customers who have not opted-out,
but not by customers who have opted-out.

20 Q DO YOU AGREE WITH THESE CALCULATIONS?

21 A Yes.

1 Q DO YOU AGREE WITH HOW MR. SCHEPERLE HAS IMPLEMENTED COST

2 **RECOVERY IN HIS RECOMMENDATIONS?**

- 3 A No. There is a problem with his recommendations.
- 4 Q

WHAT IS THAT PROBLEM?

5 A The problem lies in the fact that Mr. Scheperle has not appropriately recognized the 6 opt-out elections in distributing revenues by customer class. Although he has a 7 modest interclass revenue spread adjustment which he has proposed based on the 8 results of his cost of service study, this is totally unrelated to EE costs and does not 9 address EE costs at all.

10 Although Mr. Scheperle correctly calculates the rate per kWh to charge 11 customers for the recovery of EE costs, Mr. Scheperle assigns the total revenue 12 requirement (including EE costs) to most classes on an equal percentage basis. This 13 is particularly troublesome for the SC-P rate class which has one customer, and that 14 customer has opted-out of the EE programs.

15 Q PLEASE EXPLAIN.

16 A It is very important that the revenues assigned to rate classes reflect the proper 17 amount of cost recovery associated with the EE programs. This is especially critical 18 because opt-out kWh sales as a percent of total sales range from zero in the case of 19 RG, CB, SH SH, TEB and PFM to about 30% for GP and LP, and 100% for SC-P and 20 the lighting classes (MS, SPL, PL and LS).

The assignment is particularly critical in the case of SC-P which is a class of one customer that has opted-out of the program. If the allocation of revenue requirement to SC-P is not reduced because of the opt-out, the opt-out benefit cannot
 be realized by this customer.

3 Q HAVE YOU DEVELOPED A METHODOLOGY THAT WILL APPROPRIATELY 4 ASSIGN EE COSTS TO CLASSES AND TO CUSTOMERS WITHIN THOSE 5 CLASSES?

6 A Yes. Please refer to my Schedule MEB-RD-REB-1.

7 Q PLEASE EXPLAIN THIS SCHEDULE.

8 A For purposes of illustration, I have assumed an overall revenue increase of \$21.004 9 million. This number is used for illustrative purposes only, and the mechanics which I 10 will outline can be applied to any dollar amount of overall revenue increase and to 11 any dollar amount determined to be attributable to EE revenue requirements.

- Page 2 of the schedule identifies the opt-out kWh sales and determines the
 kWh sales excluding the opt-out kWh. Column (4) on page 2 shows the allocation of
 the \$1.004 million revenue requirement associated with EE. These calculations are
 based on and consistent with Mr. Scheperle calculations.
- Page 1 of the schedule incorporates this information into the determination ofclass revenues in the context of a rate increase.

18 Q PLEASE EXPLAIN HOW THIS IS DONE.

19 A The first step is to identify the total amount of revenue increase that is awarded to 20 Empire. As indicated previously, for purposes of illustration, I have assumed this to 21 be \$21.004 million. The second step is to identify the amount of revenue requirement 22 associated with EE. As discussed previously, I am using Mr. Scheperle's amount of \$1.004 million. To ensure that this amount is assigned appropriately in light of the
 opt-out elections, I have shown in Column (2) the allocated EE revenue requirement
 that I derived on page 2.

Column (3) is an allocation of the remaining amount of the rate increase which
in this illustration is \$20 million. I have allocated this amount as an equal percentage
on present base rate revenues in Column (1). Column (4) shows the total increase by
adding together Columns (2) and (3), and Column (5) shows the total revenue
requirement after the increase.

9 The methodology I have illustrated appropriately assigns the EE revenue 10 requirement by customer class and allocates an amount equal to the total rate 11 increase minus the EE revenue requirement on present base rate revenues.

12QIS YOUR METHODOLOGY APPROPRIATE IF THE \$1.004 MILLION IS THE13TOTAL EE REVENUE REQUIREMENT, CONSISTING OF EE COSTS CURRENTLY14RECOVERED IN RATES PLUS THE ADDITIONAL AMOUNTS TO BE15RECOVERED IN THIS CASE?

- 16 A Yes, it is appropriate.
- 17 Q PLEASE EXPLAIN.

A As an alternative to my one-step process, a more complex two-step process could be employed to deal with the EE revenue requirement. The first step would be to allocate the amount that represents the increase in the EE revenue requirement in this case in the manner that I have done on page 2 of on Schedule 1. The second step would be to identify the amount of EE revenue requirement included in current rates and adjust class revenues to recognize the opt-out in connection with those
 amounts that currently are collected in rates.

3 Q PLEASE EXPLAIN YOUR LAST STATEMENT.

A In previous cases, there has not been an explicit class recognition of EE revenue
requirements or the fact that some customers have opted-out of the programs. Thus,
it must be assumed that the EE revenue requirement currently in rates is paid for both
by customers who have opted-out and by customers who have not opted-out. This is
particularly evident in the case of the SC-P class, which is a class of one.

9 The adjustment for costs currently in rates would consist of reducing (on the 10 basis of the opt-out kWh) costs allocated to classes that contain customers who have 11 opted-out, and re-spreading those dollars on the basis of either the revenues or kWh 12 in each class associated with customers that have not opted out.

If 50% of the \$1.004 million is in current rates, and 50% is the additional
amount awarded in this case, \$502,000 would be allocated on non opt-out kWh,
\$20.502 million would be allocated as an equal percent of base rate revenues, and
\$502 thousand in current rates would be reallocated.

17

Q

WHAT IS YOUR RECOMMENDATION?

A The one-step process I have illustrated on Schedule MEB-RD-REB-1 is much easier to implement, more straightforward, and produces essentially the same result as the more involved two-step process that I just described. (I have included an illustration of the two-step process in my workpapers to show that the results of both approaches are essentially equivalent.) I recommend using the approach set forth on Schedule MEB-RD-REB-1.

1 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

2 A Yes, it does.

Qualifications of Maurice Brubaker

1	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.								
2	А	Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,								
3		Chesterfield, MO 63017.								
4	Q	PLEASE STATE YOUR OCCUPATION.								
5	А	I am a consultant in the field of public utility regulation and President of the firm of								
6		Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.								
7	Q	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND								
8		EXPERIENCE.								
9	А	I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in								
10		Electrical Engineering. Subsequent to graduation I was employed by the Utilities								
11		Section of the Engineering and Technology Division of Esso Research and								
12		Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of								
13		New Jersey.								
14		In the Fall of 1965, I enrolled in the Graduate School of Business at								
15		Washington University in St. Louis, Missouri. I was graduated in June of 1967 with								
16		the Degree of Master of Business Administration. My major field was finance.								
17		From March of 1966 until March of 1970, I was employed by Emerson Electric								
18		Company in St. Louis. During this time I pursued the Degree of Master of Science in								
19		Engineering at Washington University, which I received in June, 1970.								
20		In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis,								
21		Missouri. Since that time I have been engaged in the preparation of numerous								

1 studies relating to electric, gas, and water utilities. These studies have included 2 analyses of the cost to serve various types of customers, the design of rates for utility 3 services, cost forecasts, cogeneration rates and determinations of rate base and 4 operating income. I have also addressed utility resource planning principles and 5 plans, reviewed capacity additions to determine whether or not they were used and 6 useful, addressed demand-side management issues independently and as part of 7 least cost planning, and have reviewed utility determinations of the need for capacity 8 additions and/or purchased power to determine the consistency of such plans with 9 least cost planning principles. I have also testified about the prudency of the actions 10 undertaken by utilities to meet the needs of their customers in the wholesale power 11 markets and have recommended disallowances of costs where such actions were 12 deemed imprudent.

I have testified before the Federal Energy Regulatory Commission (FERC),
various courts and legislatures, and the state regulatory commissions of Alabama,
Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia,
Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri,
Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania,
Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia,
Wisconsin and Wyoming.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and assumed the utility rate and economic consulting activities of Drazen Associates, Inc., founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff. Our staff includes consultants with backgrounds in accounting, engineering, economics, mathematics, computer science and business. Brubaker & Associates, Inc. and its predecessor firm has participated in over 700 major utility rate and other cases and statewide generic investigations before utility regulatory commissions in 40 states, involving electric, gas, water, and steam rates and other issues. Cases in which the firm has been involved have included more than 80 of the 100 largest electric utilities and over 30 gas distribution companies and pipelines.

7 An increasing portion of the firm's activities is concentrated in the areas of 8 competitive procurement. While the firm has always assisted its clients in negotiating 9 contracts for utility services in the regulated environment, increasingly there are 10 opportunities for certain customers to acquire power on a competitive basis from a 11 supplier other than its traditional electric utility. The firm assists clients in identifying 12 and evaluating purchased power options, conducts RFPs and negotiates with 13 suppliers for the acquisition and delivery of supplies. We have prepared option 14 studies and/or conducted RFPs for competitive acquisition of power supply for 15 industrial and other end-use customers throughout the Unites States and in Canada, 16 involving total needs in excess of 3,000 megawatts. The firm is also an associate 17 member of the Electric Reliability Council of Texas and a licensed electricity 18 aggregator in the State of Texas.

In addition to our main office in St. Louis, the firm has branch offices in
Phoenix, Arizona and Corpus Christi, Texas.

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Appendix A Maurice Brubaker Page 3

BRUBAKER & ASSOCIATES, INC.

Empire District Electric Company Case No. ER-2012-0345

Rate Class	Present Base Rate Revenue ⁽¹⁾ (\$000) (1)	Allocate E Revenue equirement ⁽²⁾ (\$000) (2)	F	Allocate Additional Revenues ⁽³⁾ (\$000) (3)	Total Increase (\$000) (4)	 Total After Increase (\$000) (5)
RG	\$ 185,478	\$ 480	\$	9,193	\$ 9,673	\$ 195,151
СВ	\$ 37,676	\$ 87	\$	1,867	\$ 1,954	\$ 39,631
SH	\$ 9,595	\$ 26	\$	476	\$ 502	\$ 10,096
GP	\$ 77,977	\$ 173	\$	3,865	\$ 4,037	\$ 82,014
SC-P	\$ 3,220	\$ -	\$	160	\$ 160	\$ 3,380
TEB	\$ 33,597	\$ 104	\$	1,665	\$ 1,769	\$ 35,366
PFM	\$ 55	\$ 0	\$	3	\$ 3	\$ 58
LP	\$ 48,671	\$ 134	\$	2,412	\$ 2,546	\$ 51,217
MS	\$ 13	\$ -	\$	1	\$ 1	\$ 14
SPL	\$ 2,937	\$ -	\$	146	\$ 146	\$ 3,083
PL	\$ 4,189	\$ -	\$	208	\$ 208	\$ 4,397
LS	\$ 130	\$ -	\$	6	\$ 6	\$ 137
Total	\$ 403,538	\$ 1,004	\$	20,000	\$ 21,004	\$ 424,542

Illustrative Allocation of Revenues

⁽¹⁾ From Class Cost of Service Study

⁽²⁾ See Schedule 1, Page 2, Column (4)

⁽³⁾ Amount assumed for illustration. Equal to total rate increase minus Column (2), allocated equal percent on Column (1)

Empire District Electric Company Case No. ER-2012-0345

Illustrative Allocation	of Enorgy Efficience	x Revenue Requirement
Inustrative Anocation	OI Ellergy Ellicienc	y Revenue Requirement

Rate Class	Total <u>kWh Sales</u> (1)	Opt-Out <u>kWh Sales</u> (2)	kWh Sales Excluding Opt-Out (3)	Assignment of EE Revenue Requirement * (\$000) (4)		
RG	1,667,820,598	-	1,667,820,598	\$	480	
СВ	301,636,199	-	301,636,199	\$	87	
SH	90,854,763	-	90,854,763	\$	26	
GP	848,251,848	(248,775,086)	599,476,762	\$	173	
SC-P	62,319,241	(62,319,241)	-	\$	-	
TEB	362,016,802	-	362,016,802	\$	104	
PFM	322,800	-	322,800	\$	0	
LP	656,263,096	(191,315,358)	464,947,738	\$	134	
MS	132,876	(132,876)	-	\$	-	
SPL	17,449,686	(17,449,686)	-	\$	-	
PL	14,111,175	(14,111,175)	-	\$	-	
LS	781,199	(781,199)	-	\$	-	
Total	4,021,960,283	(534,884,621)	3,487,075,662	\$	1,004	

*Illustrative total (amount subject to adjustment) allocated on Column (3).

Source: Commission Staff Rate Design workpapers.