Exhibit No.:	
Issue:	Rate Design
Witness:	Maurice Brubaker
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Midwest Energy Consumers Group and Missouri Industrial Energy Consumers
Case No.:	ER-2016-0156
Date Testimony Prepared:	July 29, 2016

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service	))))))	**Case No. ER-2016-0156**

Direct Testimony and Schedule of

Maurice Brubaker

On behalf of

Midwest Energy Consumers Group and
Missouri Industrial Energy Consumers

July 29, 2016

BRUBAKER & ASSOCIATES, INC.

Project 10206

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service	))))))	**Case No. ER-2016-0156**

STATE OF MISSOURI)
) **SS**
COUNTY OF ST. LOUIS)

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 Midwest Energy Consumers Group and Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedule which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2016-0156.

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.

Maurice Brubaker

Subscribed and sworn to before me this 29th day of July, 2016.

MARIA E. DECKER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis City
My Commission Expires: May 5, 2017
Commission # 13706793

Notary Public

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Direct Testimony of Maurice Brubaker

Introduction and Summary

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q WHAT IS YOUR OCCUPATION?

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

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to this testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A My testimony is presented on behalf of the Midwest Energy Consumers Group ("MECG") and Missouri Industrial Energy Consumers ("MIEC").

Companies whose interests the MECG and MIEC represent purchase substantial amounts of electricity from Kansas City Power & Light Company-Greater

Missouri Operations ("GMO") and will be impacted by the decisions made in this case. Some of these companies purchase electricity from St. Joseph Light & Power Company ("SJL&P") and Missouri Public Service Company ("MOPUB").

Q WHAT IS THE SUBJECT MATTER OF YOUR TESTIMONY?

A My testimony will address the manner in which any awarded rate increase should be allocated to customer classes, and the SJL&P and MOPUB rate consolidation issue.

My silence in regard to any issue should not be construed as an endorsement of GMO's position.

Q ARE YOU FAMILIAR WITH GMO'S PROPOSAL TO CONSOLIDATE SJL&P AND MOPUB INTO A SINGLE ENTITY AND TO CONSOLIDATE THE RESPECTIVE CLASSES OF BOTH INTO A SINGLE SET OF TARIFFS?

A Yes.

Q DO YOU SUPPORT THIS CONSOLIDATION?

A Subject to a rate impact caveat and proposal that I will discuss later, I do support the consolidation.

Revenue Allocation

Q HOW SHOULD ANY REVENUE INCREASE GRANTED BY THE COMMISSION BE ALLOCATED TO THE VARIOUS CONSOLIDATED CUSTOMER CLASSES?

A On a consolidated basis, any increase in revenues approved by the Commission should be allocated as essentially an equal percentage increase to each of the customer classes; namely Residential, Small General Service, Large General

Service, Large Power Service, General Service-TOD, Thermal Energy Storage and Metered Lighting.

Q PLEASE EXPLAIN WHY YOU SUPPORT AN EQUAL PERCENTAGE ALLOCATION?

A This is a very complex case. Complexities arise because of the consolidation of SJL&P and MOPUB tariffs and the divergent rate impacts on individual customers taking service on the various rate schedules of both SJL&P and MOPUB. I agree with GMO that an across-the-board increases is appropriate because it allows all parties to focus on the task of consolidating the rate structures and moderating the impacts of the consolidation on customer groups who otherwise would receive increases substantially larger than the overall average percentage increase.

In addition, the consolidation is occurring in a case where an overall increase in rates is being proposed. This adds further to the impacts of the consolidation.

Q WILL YOU BE PRESENTING A CLASS COST OF SERVICE STUDY?

A No. I disagree with the cost of service methodology that GMO has employed, but in light of the recommendation for an equal percentage increase, I do not believe that it is an issue that needs to be addressed in this case. Were I to address class cost of service issues, I would be proposing use of a production fixed cost allocation method similar to what the Commission has approved for Ameren Missouri, and similar to what I have proposed in previous KCP&L and GMO cases; namely the average and excess-4 non-coincident peak allocation method ("A&E-4 NCP"). However, given the equal percentage increase allocation by customer class, it is not deemed necessary to present such cost of service analysis.

Rate Impacts and Mitigation

Q HAVE YOU PARTICIPATED IN THE TECHNICAL CONFERENCES THAT HAVE BEEN HELD ON THIS MATTER?

A Yes. I participated in most of the technical conferences that were held both prior to the official filing of the rate case and those that have occurred subsequently.

Q HAVE YOU REVIEWED THE IMPACTS ON LARGE POWER CUSTOMERS OF BOTH MOPUB AND SJL&P?

A Yes. Table 1 is a summary of the proposed increases to Large Power customers from both the former MOPUB area and the SJL&P area. Based on data supplied by GMO, Table 1 shows the number of customers who would receive increases larger than 10% (the overall average is 8.3%). Table 1 shows that 72, or 40%, of the MOPUB customers on the Large Power rate would receive an increase in excess of 10%. For SJL&P, only one out of 81 customers would experience an increase larger than 1%.

TABLE 1

Summary of Proposed Increases to Large Power Customers

Description	MOPUB	SJL&P
Total customers	182	81
Number with proposed increases larger than 10%	72	1
Percent greater than 10%	40%	1%

Q WHAT IS THE SOURCE OF THIS INFORMATION?

A Please refer to Schedule MEB-1, which is the cover page and pages 6 through 10 from GMO's Rate Consolidation Technical Conference # 2 presentation that took

place on May 23, 2016. These impacts are the ones that occur after each customer has been put on the rate schedule that is most suitable for its load characteristics. The data for the Large Power customers appears on pages 2 and 3 of this schedule, which are pages 6 and 7 from the technical conference presentation.

Q WHAT FEATURES OF THE CONSOLIDATED TARIFF APPEAR TO BE CAUSING SO MANY INCREASES LARGER THAN 10% ON THE MOPUB SYSTEM?

A There appear to be two primary reasons for this. The first is the introduction of a Facility Demand Charge that is based on 100% of the customers' highest maximum demand occurring in the 12 preceding months. This is a new feature for MOPUB rates. It exists in the current SJL&P rate structure, albeit at a lower level of charge.

The second feature that appears to be causing these much larger increases for MOPUB customers than for SJL&P customers is in the definition of the "Annual Base Demand." Annual Base Demand influences how both demand and energy are billed. Under current MOPUB rates, the Annual Base Demand is the lesser of:

1) The customers' maximum demand during the preceding May billing month,
2) The customers' maximum demand during the preceding October billing month, or
3) 65% of the maximum measured demand during the preceding four summer billing months.

Under the new consolidated tariff, the Annual Base Demand is redefined as 100% of the maximum demand established during the preceding four summer billing months. This change places substantially more emphasis on peak demands occurring during the summer.

Q DOES A CHANGE IN THE FACILITY DEMAND AND THE ANNUAL BASE DEMAND RAISE EQUITY CONCERNS?

A Yes. As mentioned, GMO proposes to introduce a Facility Demand Charge and a larger Annual Base Demand Charge for MOPUB customers. Both mechanisms have the practical effect of ratcheting current monthly billing demand and Facilities demand higher as a result of monthly demands that occurred as much as a year earlier.

Customers used energy and incurred monthly demands under one rate design scheme. Now, GMO proposes to change that scheme without providing customers an opportunity to modify their usage characteristics. Effectively, customers are being penalized for usage that occurred under a tariffed rate design and without any knowledge that a subsequent rate design may be introduced.

It seems inequitable to suddenly "change the rules" and impose higher rates on these customers when those customers had no knowledge that their past usage patterns could have an increasingly negative impact on future rates and without providing those customers any opportunity to respond to the new rate design.

Q DO YOU HAVE A RECOMMENDATION ON HOW TO MITIGATE THE IMPACTS OF THE CONSOLIDATED LARGE POWER TARIFF?

A Yes. Because of the change in the tariff structure, it is the increased emphasis on peak demands, especially those occurring during the summer, that contributes to the relatively large proportion of MOPUB customers that would experience increases larger than 10%. In order to moderate these impacts, I recommend a two-step phase-in of some of the rate structure changes. A two-step phase-in will allow impacts occurring at the conclusion of this case to be moderated, yet preserve the proposed rate structure for implementation 12 months thereafter.

Q WHAT SPECIFIC PHASE-IN DO YOU RECOMMEND?

A I recommend that for the rates that go into effect at the end of this case, the Facility Demand be defined as 75% of the maximum demand occurring during the preceding 12 months, and that the Annual Base Demand be defined similarly as 75% of the maximum demand experienced in any of the four summer months occurring within the preceding 12 months. In the second step, which would occur one year after these rates become effective, the 100% ratchet feature in GMO's proposed rates will be implemented.

Q SHOULD ADJUSTMENTS BE MADE IN THE CHARGES IN THE RATE IN ORDER TO RECOVER ANY REDUCTION IN REVENUE FROM YOUR RECOMMENDATION SOLELY WITHIN THE CONSOLIDATED LARGE POWER SERVICE RATE SCHEDULE?

A Yes. GMO should adjust the pricing in the tariff to preserve revenue neutrality, in a way that, as much as possible, maintains the benefit of the initial step definitions of the demand ratchets for the most-affected customers.

Q ARE THERE ANY OTHER WAYS TO ACCOMPLISH THE MODERATION?

A Yes. Another approach could be a demand credit, with the revenue reduction offset by a kilowatthour surcharge in step one, that would be reduced to zero in step two. For example, in the large power rate, a $2 per kW demand credit could be paired with a kilowatthour surcharge of $0.00396 to maintain revenue neutrality.

Q HAVE YOU MADE SIMILAR ANALYSES FOR LARGE GENERAL SERVICE CUSTOMERS?

A Yes. This summary appears on Table 2. Information for this table comes from pages 4 and 5 of Schedule MEB-1, which are pages 8 and 9 from the May 23, 2016 GMO Rate Consolidation Technical Conference # 2 presentation.

Note that the pattern here is similar to that shown in Table 1 for Large Power customers, in that 49% of the Large General Service customers would experience increases larger than 10% on the MOPUB system, but only 11% would experience increases of 10% or more on the SJL&P system.

TABLE 2

Summary of Proposed Increases to Large General Service Customers

Description	MOPUB	SJL&P
Total customers	1,602	1,239
Number with proposed increases larger than 10%	777	134
Percent greater than 10%	49%	11%

Q COULD MODERATING ADJUSTMENTS, SIMILAR TO WHAT YOU HAVE RECOMMENDED FOR THE LARGE POWER CLASS, ALSO BE MADE IN THE LARGE GENERAL SERVICE CLASS?

A Yes. The same 75% demand ratchet which I discussed above in connection with the Large Power rate could be applied to the Large General Service rate as well. The alternative approach of a $2 per kW credit could be offset by a kilowatthour surcharge of $0.00706 in order to maintain revenue neutrality.

Q ARE YOU AWARE OF OTHER JURISDICTIONS THAT PHASED-IN THE IMPACT OF RATE CONSOLIDATION?

A Yes. For example, both MidAmerican Energy Company and Interstate Power and Light Company in Iowa, and Westar Energy in Kansas, phased-in the consolidation of rates in those jurisdictions.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

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

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and President of the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in Electrical Engineering. Subsequent to graduation I was employed by the Utilities Section of the Engineering and Technology Division of Esso Research and Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of New Jersey.

In the Fall of 1965, I enrolled in the Graduate School of Business at Washington University in St. Louis, Missouri. I was graduated in June of 1967 with the Degree of Master of Business Administration. My major field was finance.

From March of 1966 until March of 1970, I was employed by Emerson Electric Company in St. Louis. During this time I pursued the Degree of Master of Science in Engineering at Washington University, which I received in June, 1970.

In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis, Missouri. Since that time I have been engaged in the preparation of numerous studies relating to electric, gas, and water utilities. These studies have included

analyses of the cost to serve various types of customers, the design of rates for utility services, cost forecasts, cogeneration rates and determinations of rate base and operating income. I have also addressed utility resource planning principles and plans, reviewed capacity additions to determine whether or not they were used and useful, addressed demand-side management issues independently and as part of least cost planning, and have reviewed utility determinations of the need for capacity additions and/or purchased power to determine the consistency of such plans with least cost planning principles. I have also testified about the prudency of the actions undertaken by utilities to meet the needs of their customers in the wholesale power markets and have recommended disallowances of costs where such actions were 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.

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

A TRUSTED ENERGY PARTNER

GMO Rate Consolidation Technical Conference #2

KCP&L SM

May 23, 2015

Best Fit Impact Summary – Large Power

Large Power Service Class				
Impact	Previous Rate			
	MO730	MO944	MO735	MO945
<-50%	0	0	0	0
-50% to -40%	0	0	0	0
-40% to -30%	0	0	0	0
-30% to -20%	1	0	0	0
-20% to -10%	0	1	1	0
-10% to 0%	4	6	0	0
0% to 10%	88	56	15	8
10% to 20%	46	1	24	0
20% to 30%	0	0	0	0
30% to 40%	0	0	0	0
40% to 50%	0	0	0	0
>50%	0	0	0	0
Ave %	8.28%	3.78%	10.63%	3.08%
Total	139	64	40	8

Best Fit Impact Summary – Large Power

Large Power Service Class				
Impact	Previous Rate			
	MO732	MO939	MO946	MO947
<-50%	0	0	0	0
-50% to -40%	0	0	0	0
-40% to -30%	0	0	0	0
-30% to -20%	0	0	0	0
-20% to -10%	0	0	0	1
-10% to 0%	0	2	2	4
0% to 10%	1	0	0	0
10% to 20%	2	0	0	0
20% to 30%	0	0	0	0
30% to 40%	0	0	0	0
40% to 50%	0	0	0	0
>50%	0	0	0	0
Ave %	9.53%	-4.79%	-6.58%	-8.45%
Total	3	2	2	5

Best Fit Impact Summary – Large General

Large General Service Class						
Impact	Previous Rate					
	MO720	MO940	MO725	MO938	MO722	MO942**
<-50%	12	19	0	0	0	4
-50% to -40%	5	14	0	0	0	1
-40% to -30%	4	19	0	0	0	4
-30% to -20%	10	38	0	0	0	6
-20% to -10%	23	116	1	0	1	10
-10% to 0%	45	315	1	8	2	32
0% to 10%	667	474	3	0	51	45
10% to 20%	616	124	12	0	56	10
20% to 30%	67	0	6	0	1	0
30% to 40%	10	0	1	0	0	0
40% to 50%	3	0	0	0	0	0
>50%	4	0	1	0	0	0
Ave %	9.40%	-2.34%	20.35%	-4.47%	10.37%	-5.06%
Total	1466	1119	25	8	111	112

**Best fit data for MO942 has been corrected since the direct filing. Corrected work papers will be included with the case update.

Best Fit Impact Summary – Large General

Large General Service - Select Detailed View						
Impact	Previous Rate					
	MO720		MO940		MO942**	
	Count	Ave. Annual $	Count	Ave. Annual $	Count	Ave. Annual $
<-50%	12	$ (1,230.40)	19	$ (1,626.46)	4	$ (1,639.95)
-50% to -45%	2	$ (1,903.64)	5	$ (1,297.18)	0	$ -
-45% to 40%	3	$ (1,729.44)	9	$ (1,522.68)	1	$ (365.30)
-40% to -35%	1	$ (3,123.74)	11	$ (1,302.84)	1	$ (1,679.00)
-35% to -30%	3	$ (2,664.15)	8	$ (1,497.65)	3	$ (1,255.55)
-30% to -25%	4	$ (1,982.31)	15	$ (964.23)	1	$ (85.74)
-25% to -20%	6	$ (1,663.35)	23	$ (1,214.44)	5	$ (1,357.44)
-20% to -15%	8	$ (1,321.12)	36	$ (1,691.38)	5	$ (1,158.68)
-15% to -10%	15	$ (1,210.74)	80	$ (1,087.92)	5	$ (909.81)
-10% to -5%	10	$ (625.77)	113	$ (1,224.75)	9	$ (1,723.01)
-5% to 0%	35	$ (306.14)	202	$ (836.71)	23	$ (437.14)
0% to 5%	88	$ 1,403.35	280	$ 809.42	34	$ 1,104.81
5% to 10%	579	$ 4,099.12	194	$ 1,354.09	11	$ 1,520.23
10% to 15%	421	$ 5,532.89	109	$ 2,221.75	10	$ 2,726.47
15% to 20%	195	$ 6,836.22	15	$ 2,855.95	0	$ -
20% to 25%	45	$ 9,101.27	0	$ -	0	$ -
25% to 30%	22	$ 6,366.01	0	$ -	0	$ -
30% to 35%	6	$ 14,845.35	0	$ -	0	$ -
35% to 40%	4	$ 9,319.15	0	$ -	0	$ -
40% to 45%	0	$ -	0	$ -	0	$ -
45% to 50%	3	$ 20,743.82	0	$ -	0	$ -
>50%	4	$ 17,348.75	0	$ -	0	$ -
Ave %	9.40%		-2.34%		-5.06%	
Total	1466	$ 4,685.13	1119	$ 178.02	112	$ 235.74