

Exhibit No.:  
Issue: Rate Design  
Witness: Maurice Brubaker  
Type of Exhibit: Surrebuttal Testimony  
Sponsoring Parties: Industrials  
Case No.: ER-2010-0356  
Date Testimony Prepared: January 12, 2011

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

\_\_\_\_\_)  
**In the Matter of the Application of** )  
**KCP&L Greater Missouri Operations** )  
**Company for Approval to Make** ) **Case No. ER-2010-0356**  
**Certain Changes in its Charges for** )  
**Electric Service** )  
\_\_\_\_\_)

Surrebuttal Testimony and Schedule of

**Maurice Brubaker**

On behalf of

**Ag Processing, Inc.**  
**Sedalia Industrial Energy Users Association**  
**Federal Executive Agencies**

January 12, 2011



**BRUBAKER & ASSOCIATES, INC.**  
CHESTERFIELD, MO 63017

Project 9216

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

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\_\_\_\_\_)

Case No. ER-2010-0356

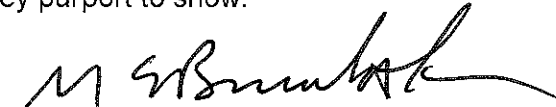
STATE OF MISSOURI        )  
  )  
COUNTY OF ST. LOUIS    )

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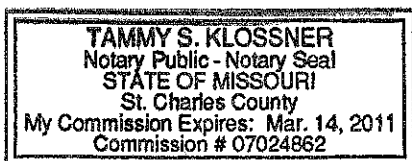
**Affidavit of Maurice Brubaker**

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 Ag Processing, Inc., Sedalia Industrial Energy Users Association and Federal Executive Agencies in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony and schedule which were prepared in written form for introduction into evidence in the Missouri Public Service Commission's Case No. ER-2010-0356.
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 11<sup>th</sup> day of January, 2011.



  
\_\_\_\_\_  
Notary Public

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

	)	
In the Matter of the Application of	)	
KCP&L Greater Missouri Operations	)	
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Electric Service	)	
	)	

**Surrebuttal 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     ARE YOU THE SAME MAURICE BRUBAKER WHO HAS PREVIOUSLY FILED**  
5        **TESTIMONY IN THIS PROCEEDING?**

6    A     Yes. I previously filed direct testimony in this proceeding on December 1, 2010 and  
7        rebuttal testimony on December 17, 2010 regarding rate design issues.

8    **Q     ARE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE OUTLINED IN**  
9        **ONE OF THESE TESTIMONIES?**

10   A     Yes. This information is included in Appendix A to my direct testimony on rate design  
11        issues filed December 1, 2010.

12   **Q     ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

13   A     I am appearing on behalf of Ag Processing, Inc., Sedalia Industrial Energy Users  
14        Association and Federal Executive Agencies (collectively "Industrials"). These

**Maurice Brubaker  
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1 customers purchase substantial amounts of electricity from KCP&L Greater Missouri  
2 Operations Company (“GMO”), both in the MPS territory and in the L&P territory. The  
3 outcome of this proceeding will have an impact on their cost of electricity.

4 **Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

5 A In my surrebuttal testimony, I will respond to certain portions of the Rebuttal  
6 Testimony of GMO witness Normand and MPSC Staff witness Scheperle.

7 The fact that I may not respond to a particular point or position should not be  
8 interpreted as an endorsement.

9 **Response to GMO**

10 **Q AT PAGE 4 OF HIS TESTIMONY, MR. NORMAND TAKES ISSUE WITH THE**  
11 **STATEMENT MADE IN YOUR TESTIMONY THAT HIS BIP APPROACH IS**  
12 **OBSCURE AND INAPPROPRIATE. IN RESPONSE, HE CLAIMS IT IS WELL**  
13 **RECOGNIZED IN THE INDUSTRY AND STATES HE HAS USED THIS APPROACH**  
14 **AS WELL AS SIMILAR METHODS FOR OVER 30 YEARS. PLEASE RESPOND**  
15 **TO MR. NORMAND’S TESTIMONY.**

16 A I readily acknowledge that Mr. Normand has proposed the BIP method on a number  
17 of occasions, and for a number of years. I also acknowledge that it is described in  
18 the NARUC Cost Allocation Manual, but the fact that it is described in the manual  
19 does not mean that it is endorsed by anyone, rather it is simply an explanation of  
20 what the method is.

21 What Mr. Normand has not rebutted, and indeed cannot rebut, is that BIP is  
22 an obscure and arcane method that has not found support in the industry. In this  
23 regard, please refer to Schedule MEB-COS-SR-1 which is the response to MIEC

1 Data Request No. 2.1 in the companion KCPL rate case, Case No. ER-2010-0355.  
2 In response to the request to identify rate proceedings that Mr. Normand was aware  
3 of where the BIP method was adopted, all that Mr. Normand was able to provide was  
4 a reference to the November 2010 decision by the Kansas Corporation Commission  
5 in the KCPL Iatan 2 rate case. I would certainly think that if Mr. Normand had  
6 succeeded in selling the BIP method during the last 30 or so years that he has been  
7 promoting it, that he would be able find at least one instance where it was adopted by  
8 a Commission prior to 2010.

9 **Q AT PAGE 6 OF HIS TESTIMONY, MR. NORMAND BEGINS A CRITICISM OF THE**  
10 **4 CP ALLOCATION METHOD. DID YOU RECOMMEND THE USE OF A 4 CP**  
11 **ALLOCATION METHOD FOR PRODUCTION AND TRANSMISSION FACILITIES?**

12 **A** No. My recommendation was to use an Average and Excess – 4 Non-Coincident  
13 Peak (“A&E-4 NCP”) method. Indeed, the rates of return that Mr. Normand attributes  
14 to me on page 3 of his testimony are the rates of return under the A&E-4 NCP study  
15 which appear on my Schedule MEB-COS-MPS-4 and Schedule MEB-COS-L&P-4. It  
16 is true that I also presented (in the Appendix to my schedules) supplemental studies  
17 using 4 CP, and also A&E-2 NCP. I do not know why Mr. Normand seems to think  
18 that I recommended 4 CP when, in fact, I think it is very clear that I recommended  
19 A&E-4 NCP, the same method that this Commission recently approved for application  
20 to the summer peaking utility on the eastern side of the state, Ameren Missouri.

1 Q ON PAGE 6 OF HIS TESTIMONY, MR. NORMAND FURTHER STATES THAT  
2 ALTHOUGH YOU PROVIDE A MODIFIED VERSION OF HIS STUDY, YOU  
3 LIMITED YOUR PRESENTATION TO THE MAJOR CLASSES, AND DID NOT  
4 BREAKDOWN THE STUDIES BY SEASON OR ANY FURTHER DETAIL. IS MR.  
5 NORMAND CORRECT?

6 A No. All Mr. Normand would have had to do was to look at the workpapers supplied in  
7 association with my direct testimony. The workpapers contain the results of class  
8 cost of service studies using my recommended method (and the alternatives as well)  
9 in exactly the same rate schedule, voltage level and seasonal detail as Mr.  
10 Normand's studies.

11 Q DO YOU HAVE ANY COMMENT ON THE TABLE ON PAGE 4 OF MR.  
12 NORMAND'S REBUTTAL TESTIMONY?

13 A Yes. Here he compares 4 CP allocation factors and energy allocation factors and  
14 concludes that, since the residential class is allocated more cost on a 4 CP basis than  
15 it is allocated on an energy basis, somehow the result is illogical.<sup>1</sup> This is at the heart  
16 of the problem with Mr. Normand's approach to cost allocation. It essentially blurs the  
17 distinction between fixed costs and variable costs and masks the significant  
18 differences in cost-causation presented by "peaking" load shapes as compared to  
19 stable load shapes. I will also note that while Mr. Normand criticizes the 4 CP  
20 demand allocation for allocating more fixed cost to residential customers than does  
21 an energy allocator, that Mr. Normand's allocation of base load fixed costs to  
22 residential customers is 11% less than the allocation factor for energy. Such a result

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<sup>1</sup>I did not recommend 4 CP, so it is not clear why Mr. Normand references it.

1 is completely illogical for a low load factor class that has high peaks in relation to its  
2 average demand (energy).

3 **Response to Commission Staff**

4 **Q AT PAGE 4 OF HIS REBUTTAL TESTIMONY, IN A FOOTNOTE, MR. SCHEPERLE**  
5 **GENERALLY DESCRIBES THE ECONOMIC CHARACTERISTICS OF DIFFERENT**  
6 **TYPES OF GENERATION UNITS. DID YOU TAKE THIS INTO CONSIDERATION**  
7 **IN YOUR SELECTION OF THE A&E-4 NCP METHODOLOGY?**

8 A Yes, I did. And, in my rebuttal testimony, I illustrated the technology tradeoffs and  
9 explained why, even if an analyst wanted to give more weight to the classes' relative  
10 energy usage, only energy use up to a certain point (load factor) was relevant in  
11 driving a technology choice and that using annual energy as a basis to allocate any  
12 generation fixed cost was wrong. Nothing in Mr. Scheperle's rebuttal testimony  
13 changes those facts.

14 **Q ON PAGE 6 OF HIS REBUTTAL TESTIMONY, MR. SCHEPERLE DESCRIBES**  
15 **THE A&E METHOD AS CONSISTING OF AN AVERAGE PART AND AN EXCESS**  
16 **PART. HE DESCRIBES THE EXCESS PART AS A MEASURE OF DEMAND**  
17 **EQUAL TO EACH CLASS'S CONTRIBUTION TO THE SYSTEM PEAK LOAD. IS**  
18 **THIS THE CORRECT DESCRIPTION?**

19 A No. The excess portion of the Average and Excess ("A&E") method is equal to the  
20 difference, for each class, between the non-coincident peak (in the case at hand the  
21 average of the 4 non-coincident peaks) and the average demand.

1 Q ARE THE A&E METHODS BASED ON AN ASSUMPTION THAT ADDITIONAL  
2 GENERATION FACILITIES ARE ONLY BUILT TO MEET PEAK DEMANDS?

3 A No. The A&E method considers both class average demands and the maximum  
4 demands of each class. This, indeed, is the strength of the A&E method. Under the  
5 A&E method, every customer class is assigned at least its average demand.  
6 Furthermore, no customer class is over-allocated fixed costs (as is the case with the  
7 BIP method – which allocates 100% of the fixed costs associated with base load  
8 facilities on class kWh), without regard to important class load characteristics like the  
9 maximum requirements of the classes.

10 Q ON PAGE 8 OF HIS REBUTTAL TESTIMONY, MR. SCHEPERLE ADDRESSES  
11 THE 4 CP ALLOCATION METHOD AND EXPRESSES CONCERNS ABOUT THE  
12 FACT THAT IT WOULD ASSIGN NO COST TO OFF-PEAK CUSTOMERS SUCH  
13 AS LIGHTING. DO YOU HAVE ANY COMMENTS ABOUT THIS?

14 A Yes. Although I have not proposed 4 CP as my primary method of allocation, it would  
15 be my second choice to the A&E-4 NCP method that I did recommend. The concern  
16 about the lighting class is the classic case of the tail wagging the dog. It is only the  
17 lighting class that in the summer is essentially off-peak. And, the lighting class is a  
18 very small portion of the total system (only about 1% of the A&E-4 NCP), so its results  
19 should not be allowed to drive the selection of allocation methods.

20 Furthermore, I would note that for purposes of allocating fixed generation  
21 costs between Kansas and Missouri in the KCPL case, the Commission Staff  
22 supports the 4 CP method that the Commission has previously found appropriate for  
23 this purpose. That method is more favorable to Missouri than energy-based methods  
24 (like BIP) because the 4 CP method does not allocate excessive fixed costs to high



1 load factor loads, such as the State of Missouri in comparison to the State of Kansas.  
2 It is interesting that the Staff finds a method such as 4 CP to be appropriate for  
3 jurisdictional allocation purposes, but in the same case feels compelled to propose a  
4 radically different method when it comes to allocating costs among retail customer  
5 classes.

6 **Q WHAT DOES MR. SCHEPERLE SAY ABOUT THE ALLOCATION OF**  
7 **OFF-SYSTEM SALES?**

8 A At page 9 of his rebuttal testimony, he takes issue with GMO's allocation of  
9 off-system sales margin on the basis of steam fixed generation plant, and supports  
10 the allocation of off-system sales margins on the basis of energy usage, adjusted for  
11 losses to the generation level. He notes with approval that the Commission adopted  
12 this method in KCPL Case No. ER-2006-0314 and in the recent Ameren Missouri  
13 Case No. ER-2010-0036. Mr. Scheperle does not explain why this precedent is  
14 important when it comes to the allocation of off-system sales but can be ignored  
15 when it comes to the method for allocating generation fixed costs...such as 4 CP in  
16 the case of previous KCPL studies, and A&E-4 NCP in the case of the prior Ameren  
17 case.

18 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

19 A Yes, it does.

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**Maurice Brubaker**  
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Company Name: KCPL MO  
Case Description: 2010 KCPL Rate Case  
Case: ER-2010-0355

Response to Vuylsteke Diana Interrogatories – Set MIEC\_20101129  
Date of Response: 12/09/2010

Question No. :2.1

Please identify all regulatory proceedings of which Mr. Normand is aware where the regulatory commission adopted the base-intermediate-peak method of cost allocation that Mr. Normand has proposed in this case.

RESPONSE:

Mr. Normand does not keep or maintain a list of the adoption of the base, intermediate and peak allocation procedure in his associated regulatory proceedings. Mr. Normand is, however, well aware of its development and use as an appropriate and reasonable allocation method for production allocation.

Additionally, in the report and order issued on November 22, 2010 by the Kansas Corporation Commission regarding the recent KCP&L rate case (10-KCPE-415-RTS) the Commission expressed its support and adoption of the base, intermediate and peak allocation procedure.

Attachment: Q2.1 MO Verification.pdf