FILED

APR 25 2007

APR 25 2007

Missouri Public

Service Commission

Exhibit No.:

Witness:

Type of Exhibit:

Maurice Brubaker Direct Testimony

issues:

Fuel Adjustment

Sponsoring Party: Case No.:

Missouri Industrial Energy Consumers ER-2007-0002

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

In the Matter of Union Electric Company d/b/a
AmerenUE for Authority to File Tariffs Increasing
Rates for Electric Service Provided to Customers
in the Company's Missouri Service Area.

Case No. ER-2007-0002

**Direct Testimony of** 

Maurice Brubaker on Fuel Adjustment Issues

PILE 29 2006

DEC 29 2006

Missouri Publishir

Service Commission

On Behalf of

Missouri Industrial Energy Consumers

December 29, 2006 Project 8632



Brubaker & Associates Inc. St. Louis. MO 63141-2000

MIEC CXD.08 ... 702

Date 3/12/02 Case No. ER-2007-0002

Reporter



Diana M. Vuylsteke Voice (314) 259-2543 dmvuylsteke@bryancave.com

FILED

DEC 2 8 2006

Befyles Commission

#### BY HAND DELIVERY

December 29, 2006

Cully Dale Secretary/Chief Administrative Law Judge Missouri Public Service Commission 200 Madison Street Jefferson City, MO 65101

RE: Case No. ER-2007-0002

Dear Judge Dale:

Attached for filing on behalf of the Missouri Industrial Energy Consumers in the above-referenced case are an original and eight (8) copies each of the following:

- Direct Testimony of William Hinckley
- Direct Testimony of Gareth Kajander,
- Direct Testimony of Albert Owen
- Direct Testimony and Schedules of Maurice Brubaker on Cost of Service, Revenue Allocation and Rate Design
- Direct Testimony and Schedules of Maurice Brubaker on Fuel Adjustmemt, and
- Direct Testimony and Schedules of Jim Dauphinais (NP and HC versions)

Thank you for your assistance in bringing these filings to the attention of the Commission.

Very truly yours,

Diana M. Vuylsteke

Diana M. Vuylstike

DMV:ln

Attachments cc: All Parties

Bryan Cave LLP

One Metropolitan Square

211 North Broadway

Suite 3600

St. Louis, MO 63102-2750

Tel (314) 259-2000

Fax (314) 259-2020

www.bryancave.com

Chicago

Hong Kong

Irvine

Jefferson City

Kansas City

Kuwait

Los Angeles

New York

Phoenix

Shanghai

St. Louis

Washington, DC

And Bryan Cave,

A Multinational Partnership,

London

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

| In the Matter of Union<br>AmerenUE for Author<br>Rates for Electric Sen<br>in the Company's Miss | )              | Case No. ER-2007-0002 |  |
|--|----------------|-----------------------|--|
| STATE OF MISSOURI<br>COUNTY OF ST. LOUIS   | )<br>) ss<br>) |                       |  |

#### **Affidavit of Maurice Brubaker**

Maurice Brubaker, being first duly swom, 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 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.
- 2. Attached hereto and made a part hereof for all purposes is my direct testimony and schedules on fuel adjustment issues which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2007-0002.
- 3. I hereby swear and affirm that the testimony is true and correct and that it shows the matters and things that it purports to show.

Maurice Brubaker

Subscribed and sworn to before me this 28th day of December 2006.

CAROL SCHULZ
Notary Public - Notary Sees
STATE OF MISSOUR)
St. Louis County

My Commission Expires: Feb. 26, 2008

Carol Schug Notary Public

My Commission Expires February 26, 2008.

BRUBAKER & ASSOCIATES, INC.

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

In the Matter of Union Electric Company d/b/a
AmerenUE for Authority to File Tariffs Increasing
Rates for Electric Service Provided to Customers
in the Company's Missouri Service Area.

Case No. ER-2007-0002

#### **Direct Testimony of Maurice Brubaker**

PLEASE STATE YOUR NAME AND BUSINESS ADDRESS. Q Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, 3 St. Louis, Missouri 63141-2000. WHAT IS YOUR OCCUPATION? Q 5 I am a consultant in the field of public utility regulation and president of Brubaker & Associates, Inc., energy, economic and regulatory consultants. 6 PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE. 8 This information is included in Appendix A to my direct testimony on revenue 9 requirement issues. ON WHOSE BEHALF ARE YOU PRESENTING THIS DIRECT TESTIMONY ON 10 Q **FUEL ADJUSTMENT ISSUES?** 11 12 This testimony is presented on behalf of the Missouri Industrial Energy Consumers Α (MIEC). I am simultaneously submitting a separate volume of testimony which 13 14 addresses class cost of service, revenue allocation and rate design issues.

#### Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

- 2 A The purpose of this testimony is to address fuel adjustment-related issues for
- 3 AmerenUE.

#### 4 Q PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

- 5 A My testimony and recommendations may be summarized as follows:
- AmerenUE's proposed FAC would require extremely complicated and extensive calculations and poses a significant risk of over-allocation of costs to retail customers.
- 9 2. AmerenUE's proposed FAC procedure is incomplete and unclear and, where identifiable, certain of the allocations are improper and disadvantageous to customers.
- AmerenUE has not yet explained how it would deal with the non-operation of the Taum Sauk facility when reconciling costs under the FAC between the modeled base case, which assumes full operation of Taum Sauk and the actual reality, which will be an absence of Taum Sauk.
- Rather than AmerenUE's proposed fuel adjustment mechanism, I propose that if there is a fuel adjustment approved it include all appropriate variable fuel and purchased power costs, with an offset for all revenues from off-system sales.
- 5. My mechanism will simplify the process, reduce the chances of over-allocating costs to retail customers and provide for a tracking of revenues from off-system sales.
- 23 6. I also propose (as shown on Schedule MEB-FAC-3) a sharing mechanism of the net of expenses and off-system sales revenue, both upward and downward, from the base point. This sharing provides incentives to AmerenUE to reduce costs and to improve operations to the mutual benefit of it and the customer.
- 7. The base point of the fuel adjustment clause should be set equal to the Commission's final determination of includable variable fuel and purchased power costs, and appropriate net MISO charges, minus the expected amount of revenues from off-system sales.

| 1 | Adjustment to | for | Changes | in | the | Level |
|---|---------------|-----|---------|----|-----|-------|
|---|---------------|-----|---------|----|-----|-------|

#### 2 of Fuel and Purchased Power Costs

- 3 Q ARE YOU FAMILIAR WITH AMERENUE'S PROPOSAL TO IMPLEMENT A FUEL
- 4 ADJUSTMENT CLAUSE (FAC)?
- 5 A Yes, I am. It proposes to implement a fuel adjustment clause which would track
- 6 increases and decreases in the level of fuel and variable purchased power expenses
- 7 allocated to Missouri retail native load customers.
- 8 Q DO YOU HAVE ANY CONCERNS ABOUT THE PROPOSED FUEL ADJUSTMENT
- 9 CLAUSE?

12

13

15

16

17

18

19

20

21

22

- 10 A Yes, I have several concerns.
- 11 Q PLEASE ELABORATE.
  - The first concern I have is with respect to the accuracy of the allocation of costs and credits between those properly attributable to service rendered to native load customers and those that are associated with the Company's off-system sales activities. AmerenUE's proposed clause requires a determination of the costs attributable to supplying native load customers, as distinguished from the costs to supply off-system sales. Mr. Dauphinais describes in considerably more detail the large variety of costs and credits (over 30 MISO-related changes plus many others) that must be considered when operating in the MISO environment, the difficulty of accurately allocating these costs and credits between native load sales and off-system sales and the challenge posed by the need to audit and track these allocations in order to be certain that they are properly performed.

#### Q PLEASE EXPLAIN YOUR USE OF THE TERM "NATIVE LOAD."

Native load refers to the sales to Missouri retail jurisdictional customers as well as the sales to certain FERC jurisdictional wholesale customers. I use the term native load because the first step in the allocation process is between native load sales and the off-system, or interchange, sales. The allocation between Missouri retail jurisdictional customers and FERC jurisdictional customers is relatively straightforward and is not really an issue. The issue is segregating the costs attributable to off-system sales, which is a requirement under AmerenUE's proposed FAC.

#### 9 Q PLEASE ELABORATE ON THESE CONCERNS.

Α

Α

Α

As Mr. Dauphinais explains, there are over 30 MISO-related charges, credits, and other components of revenues and costs that must be assigned or allocated between native load and off-system sales. He points out that in many respects, AmerenUE's allocation or assignment process is incomplete and unclear. Furthermore, he has identified several specific procedures that are questionable and which would benefit the stockholders at the expense of customers.

Either AmerenUE has given insufficient thought to the allocation and assignment of costs, credits, and other components between native load and offsystem sales, or it has developed an allocation/assignment procedure that is beneficial to stockholders to the detriment of customers. The Commission should not permit a structure and process that allows and/or incents such a result.

#### Q HAVE YOU IDENTIFIED ANY OTHER CONCERNS?

Yes. Another concern relates to how the Taum Sauk facility would be handled for purposes of the fuel adjustment clause. AmerenUE has calculated its pro forma test

| year rate case fuel and purchased power costs and off-system sales assuming that     |
|--|
| Taum Sauk would be in full normal operation. It then proposes to have a fuel         |
| adjustment clause that reconciles actual costs with the test year cost from the rate |
| case. Although it has been requested to do so (MIEC Data Request No. 17-5, issued    |
| November 17, 2006), AmerenUE has not yet explained how it would account for          |
| Taum Sauk on a going-forward basis when the actual costs will represent the          |
| AmerenUE system without the operation of the Taum Sauk facility. This is a major     |
| disconnect between the rate case assumptions and AmerenUE's fuel clause and          |
| must be satisfactorily resolved before any fuel clause can be considered.            |

Q

# IF AN FAC IS PERMITTED, HOW SHOULD OFF-SYSTEM SALES AND THE COSTS ASSOCIATED WITH OFF-SYSTEM SALES BE HANDLED?

For the reasons expressed (by Mr. Dauphinais and by me), total variable fuel and purchased power costs should be included in the fuel clause, and the entire amount of revenues collected from off-system sales should be handled as a credit and used to offset costs in the fuel adjustment factor.

Inclusion of all of the costs, with an offset for all revenues collected from off-system sales, overcomes the difficulty associated with continuously allocating costs between native load sales and off-system sales, and eliminates the risk of misassignments and allocations.

In addition, because the level of off-system sales is difficult to predict (see, for example, the direct testimony of Shawn Schukar at page 18) including the revenues from off-system sales in the fuel adjustment clause has the added benefit of tracking the level of sales, and flowing the actual level through to customers.

#### Q PLEASE DESCRIBE AMERENUE'S PROPOSED TREATMENT, AND CONTRAST

#### 2 THAT WITH YOUR PROPOSAL.

Q

Α

Please refer to Schedule MEB-FAC-1. This diagram outlines AmerenUE's proposed treatment of resource costs and credits and off-system sales revenue. The box at the top constitutes the total of all the different MISO charges, credits, adjustments and various fuel costs, purchased power costs and other market-related charges that have to be dealt with. The two boxes below it are first, the shares assigned or allocated to native load and used to determine the fuel adjustment, and second, the shares assigned or allocated to off-system sales. Each of the lines with the designation " $X_1, X_2 ... X_n$ " represent the individual items that are in the first box that must be assigned or allocated to the other two boxes.

After having made these assignments or allocations, the FAC charge to native load customers would be determined by subtracting the FAC base from the allocated costs. It is obvious from this diagram that if too many costs are assigned or allocated to native load, or if revenues or credits are underassigned to native load, the amount charged to native load customers through the FAC will be overstated.

#### WHAT IS SHOWN AT THE BOTTOM OF THE DIAGRAM?

The bottom of the diagram shows the shares assigned or allocated to off-system sales. The amount of margin on off-system sales will be calculated as off-system sales revenue minus these amounts. If the margin from off-system sales is hardwired or fixed into the revenue requirement, these dollar amounts, whatever they are, would be retained by AmerenUE for the benefit of its stockholders. If there is some allocation of margin, then this is the number that would be compared to the amount of margin that was embedded in base rates.

#### Q PLEASE NOW EXPLAIN YOUR PROPOSED STRUCTURE.

Α

Α

This is shown on Schedule MEB-FAC-2. The box at the top contains all of the same elements as on Schedule MEB-FAC-1. The difference is that there is no need to allocate all of the myriad costs, charges, credits and other components between native load and off-system sales. Rather, as shown on the diagram, the off-system sales revenue actually received is subtracted from the total costs to determine the FAC cost. The base amount of the FAC is subtracted from the total of FAC costs in order to determine the FAC charge. (These amounts are expressed per kWh.)

#### Q WOULD THE BASE POINT OF THE FAC BE THE SAME IN BOTH CASES?

No. The base point of the FAC would be different under my proposal because it would equal the total fuel costs minus revenues from off-system sales, or, stated differently, the equivalent of fuel costs <u>properly</u> allocated to retail native load customers minus the <u>properly</u> calculated margin from off-system sales. Under AmerenUE's proposal, the base would equal the costs allocated to retail native load customers, without an offset for off-system sales revenue.

#### Q PLEASE SUMMARIZE WHY YOU BELIEVE YOUR METHOD IS SUPERIOR.

I believe it is superior for several reasons. First, it avoids the complexities and potential for mis-assignments or mis-allocations that are associated with AmerenUE's proposal. My approach reduces the risk to customers of bearing too much of the cost, or receiving too little of the revenues. Second, it retains for the benefit of retail customers the total amount of the margin realized from off-system sales. Also, it greatly simplifies the auditing process.

| 1  | Q | DOES THE FUEL AND PURCHASED POWER COST RECOVERY RULE                                   |
|----|---|--|
| 2  |   | RECENTLY ADOPTED BY THE COMMISSION PERMIT THIS TREATMENT OF                            |
| 3  |   | REVENUES FROM OFF-SYSTEM SALES?  |
| 4  | Α | Yes. The adopted rule explicitly allows for inclusion in the fuel adjustment clause of |
| 5  |   | the costs and revenues associated with off-system sales.                               |
| 6  |   | In the current instance, it is imperative that if there is a fuel adjustment clause,   |
| 7  |   | the revenues from off-system sales be treated in the manner that I have proposed.      |
| 8  |   | Failure to do so would greatly complicate the fuel adjustment mechanism and would      |
| 9  |   | create a substantial risk of overcharges to retail customers.                          |
|    |   |  |
| 10 | Q | IF A FUEL ADJUSTMENT CLAUSE IS IMPLEMENTED, SHOULD THE CLAUSE                          |
| 11 |   | PASS THROUGH TO CUSTOMERS 100% OF ANY CHANGES IN THE LEVEL OF                          |
| 12 |   | COSTS AND REVENUES?  |
| 13 | Α | No. I believe it is important that any adjustment mechanism that is implemented        |
| 14 |   | provide some incentives for the utility to control costs and take other actions which  |
| 15 |   | will reduce the level of charges to customers.   |
|    |   |  |
| 16 | Q | DO YOU HAVE A SPECIFIC PROPOSAL?   |
| 17 | Α | Yes, I do. My proposal consists of a fuel adjustment clause with a base point          |
| 18 |   | surrounded by a symmetrical deadband, followed on each side by two sharing bands       |
| 19 |   | I also propose a cap on the maximum amount of sharing. It is illustrated or            |
| 20 |   | Schedule MEB-FAC-3.  |
|    |   |  |

#### Q PLEASE ELABORATE ON YOUR PROPOSAL.

Α

Specifically, I propose that there be a  $\pm$ \$10 million deadband around the base point in the FAC. This deadband gives the utility an incentive to manage costs, and also adds stability to the rates because small changes or deviations from the base point would not trigger changes in the level of rates. The  $\pm$ \$10 million (annually) translates into approximately a  $\pm$ 0.2 percentage points (20 basis points) return on common equity.

Outside of the deadband, I propose that for the next \$50 million of change in net costs (beyond the \$10 million deadband) there be a sharing of 90% to customers and 10% to stockholders. At the full \$50 million, the 10% to stockholders amounts to \$5 million or approximately one-tenth of one percent (10 basis points) in return on equity. Beyond this initial \$60 million deviation, the next \$50 million would be split 80% to customers and 20% to stockholders, and at the full \$50 million would represent \$10 million or two-tenths of one percent (20 basis points) return on equity for stockholders. Beyond this \$110 million, there would be full flow through to customers of any changes in net costs.

The cumulative impact at a \$60 million deviation from the base is \$15 million to stockholders or 30 basis points return on equity, and the full \$110 million deviation (after which there is a full flow-through to customers) amounts to \$25 million or 50 basis points return on equity.

#### 21 Q PLEASE EXPLAIN WHY YOU MAKE THIS SPECIFIC PROPOSAL.

I believe it is important that the utility have an incentive to control costs and to perform in a superior manner. Allowing the utility to share in the benefits of such

| ı  |   | performance, and requiring it to also share in the consequences of performance that          |
|----|---|--|
| 2  |   | results in higher cost to customers, gives the proper incentive to the utility.              |
| 3  |   | Under this form of fuel clause, if the utility performs in a superior fashion it can         |
| 4  |   | reap some of the rewards of its performance. Both customers and shareholders are             |
| 5  |   | beneficiaries under such circumstances. Similar incentives exist under circumstances         |
| 6  |   | of increasing costs. In other words, it is a symmetrical incentive.                          |
|    |   |  |
| 7  | Q | WHAT IS THE PURPOSE OF FLOWING THROUGH TO CUSTOMERS 100% OF                                  |
| 8  |   | THE DEVIATIONS BEYOND ±\$110 MILLION FROM THE BASE POINT?                                    |
| 9  | Α | Given the ±\$10 million deadband and the two sharing bands, at a deviation of \$110          |
| 0  |   | million either way from the base point, the variation in the utility's return on equity is   |
| 1  |   | 50 basis points (0.5 percentage points). It is reasonable to have some cap on the            |
| 2  |   | level of the sharing in order to protect the utility from too large of an impact if costs go |
| 3  |   | up, and to allow the customers to still receive the majority of the benefits if costs go     |
| 4  |   | down.  |
|    |   |  |
| 15 | Q | PLEASE EXPLAIN HOW THIS SHARING MECHANISM WOULD BE   |
| 16 |   | ADMINISTERED IN THE CONTEXT OF THE FUEL FILINGS.   |
| 17 | Α | The deadband and sharing bands are expressed on an annual basis. In the context              |
| 18 |   | of quarterly filings, 25% of the bands would be allocated to each quarter for purposes       |
| 19 |   | of the quarterly filings proposed by AmerenUE. At the end of each year, the                  |

against the amounts applied on a quarterly basis.

deadband and sharing bands would be applied on an annual basis and reconciled

20

21

| 1  | a | DURING THE RULEMAKING WHICH LED TO THE ADOPTION OF THE FUEL                             |
|----|---|---|
| 2  |   | AND PURCHASED POWER COST RECOVERY RULE, MIEC ARGUED IN FAVOR                            |
| 3  |   | OF ADOPTING AN "EARNINGS TEST" WHICH WOULD HAVE REQUIRED A                              |
| 4  |   | SHOWING THAT A UTILITY WAS NOT EARNING IN EXCESS OF ITS                                 |
| 5  |   | AUTHORIZED ROE BEFORE ANY CHANGE IN THE LEVEL OF FUEL COST                              |
| 6  |   | RECOVERY COULD BE FLOWED THROUGH THE FUEL CLAUSE. ARE YOU                               |
| 7  |   | PROPOSING SUCH A MECHANISM IN THIS CASE?  |
| 8  | Α | No, we are not making that proposal in this case. The fact that we are not making the   |
| 9  |   | proposal in this case does not mean that we no longer believe such an element of the    |
| 10 |   | fuel adjustment clause to be appropriate. Rather, while we still believe such a feature |
| 11 |   | is appropriate, it is apparent that the Commission is not prepared to adopt such a      |
| 12 |   | mechanism at this time. MIEC believes that the Commission should monitor the            |
| 13 |   | results of the fuel clause that it does implement (assuming one is implemented) and     |
| 14 |   | remain open to the implementation of an earnings test at a future point in time. MIEC   |
| 15 |   | reserves the right to propose such a provision at a future point in time should it      |
| 16 |   | appear to be warranted.   |

#### 17 Q DO YOU HAVE ANY OTHER COMMENTS?

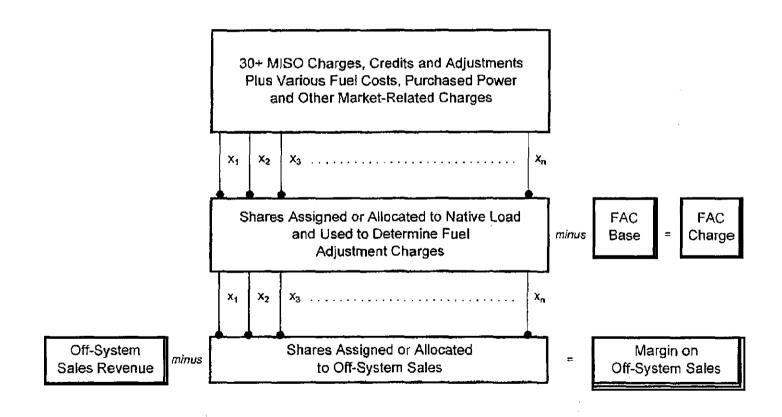
Yes. There are a number of data requests propounded to AmerenUE more than 20 days ago that remain unanswered. We reserve the right to supplement our testimony as appropriate.

#### 21 Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

22 A Yes, it does.

WHIFTSHARESIP OCCUPATION TESTINATE - BANKNOW OCC

## AmerenUE's Proposed Treatment of Resource Costs and Credits and Off-System Sales Revenue



# Recommended Treatment of Resource Costs and Credits and Off-System Sales Revenue

30+ MISO Charges, Credits and Adjustments Plus Various Fuel Costs, Purchased Power and Other Market-Related Charges

minus

Off-System
Sales Revenue

=

**FAC Costs** 

minus

FAC Base

=

FAC Charge

# Proposed Sharing Structure (\$ Millions)

| Chango in                                  | Sharing Percent |                  | Maximum<br>Sharing Dollars |                  | Cumulative<br>Sharing Dollars |                  | Cumulative<br>Impact on |
|--|-----------------|------------------|----------------------------|------------------|-------------------------------|------------------|-------------------------|
| Change in<br>Net Cost Level<br>from Base * | Customer        | Stock-<br>holder | Customer                   | Stock-<br>holder | Customer                      | Stock-<br>holder | Return on<br>Equity     |
| \$110                                      |                 |                  | \$40                       | \$10             | \$85                          | \$25             | 50 Basis Points         |
| }  | 80%             | 20%              |                            |                  |                               |                  |                         |
| \$60                                       |                 |                  | \$45                       | \$5              | \$45                          | <b>\$</b> 15     | 30 Basis Points         |
| }  | 90%             | 10%              |                            |                  |                               |                  |                         |
| \$10 J                                     |                 |                  | \$0                        | <b>\$</b> 10     | <b>\$</b> 0                   | \$10             | 20 Basis Points         |
| BASE                                       | <b>≻</b> 0%     | 100%             |                            |                  |                               |                  |                         |
| لر (\$10)                                  |                 |                  | \$0                        | \$10             | \$0                           | <b>\$</b> 10     | 20 Basis Point          |
| }  | 90%             | 10%              |                            |                  |                               |                  |                         |
| (\$60)                                     |                 |                  | \$45                       | \$5              | \$45                          | <b>\$</b> 15     | 30 Basis Point          |
| }  | 80%             | 20%              |                            |                  |                               |                  |                         |
| (\$110)                                    |                 |                  | \$40                       | \$10             | \$85                          | \$25             | 50 Basis Points         |

<sup>\*</sup>Fuel and purchased power costs minus off-system sales revenue

---