

Exhibit No.:  
Witness: James R. Dauphinais  
Type of Exhibit: Surrebuttal Testimony  
Issues: Net Base Fuel Cost  
Sponsoring Party: Missouri Industrial Energy Consumers  
Case No.: ER-2010-0036

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

\_\_\_\_\_  
**In the matter of Union Electric,  
d/b/a AmerenUE's Tariffs to  
Increase Its Annual Revenues for  
Electric Service**  
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**Case No. ER-2010-0036**  
Tariff Nos. YE-2010-0054  
and YE-2010-0055

Surrebuttal Testimony and Schedules of

**James R. Dauphinais**

**Revenue Requirement**

**NON-PROPRIETARY VERSION**

On behalf of

**Missouri Industrial Energy Consumers**

March 5, 2010

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

Project 9187



**BEFORE THE PUBLIC SERVICE COMMISSION  
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STATE OF MISSOURI     )  
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COUNTY OF ST. LOUIS    )     SS

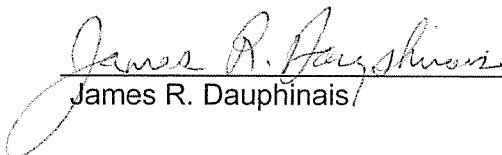
**Affidavit of James R. Dauphinais**

James R. Dauphinais, being first duly sworn, on his oath states:

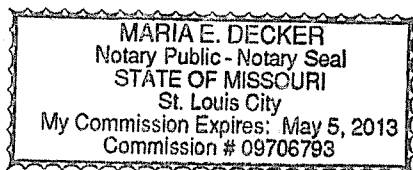
1. My name is James R. Dauphinais. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Missouri Industrial Energy Consumers in this proceeding on their behalf.

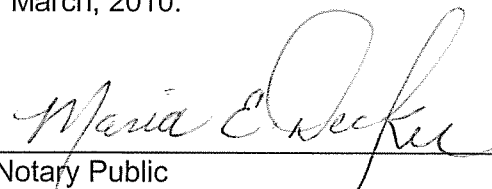
2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and schedules which were prepared in written form for introduction into evidence in the Missouri Public Service Commission Case No. ER-2010-0036.

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

  
James R. Dauphinais

Subscribed and sworn to before me this 4<sup>th</sup> day of March, 2010.



  
Notary Public



**BEFORE THE PUBLIC SERVICE COMMISSION  
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**Case No. ER-2010-0036**  
Tariff Nos. YE-2010-0054  
and YE-2010-0055

**Surrebuttal Testimony of James R. Dauphinais**

**INTRODUCTION**

**Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A James R. Dauphinais. My business address is 16690 Swingley Ridge Road,  
Suite 140, Chesterfield, MO 63017.

**Q ARE YOU THE SAME JAMES R. DAUPHINAIS WHO HAS PREVIOUSLY FILED  
TESTIMONY IN THIS PROCEEDING ON BEHALF OF MIEC?**

A Yes. I have previously filed direct testimony on revenue requirement issues on behalf  
of the Missouri Industrial Energy Consumers ("MIEC").

**Q WHAT IS THE SUBJECT OF YOUR SURREBUTTAL TESTIMONY?**

A I respond to the rebuttal testimony of AmerenUE witnesses Finnell and Irwin as they  
pertain to AmerenUE's Net Base Fuel Cost.<sup>1</sup> I also respond to Staff witness  
Maloney's supplemental rebuttal testimony concerning a correction to the normalized

<sup>1</sup>I extensively use the terms Net Base Fuel Cost and Net Fuel Cost in this testimony. As discussed on page 4 of my direct testimony, Net Base Fuel Cost is AmerenUE's Net Fuel Cost plus Other Fuel And Purchased Power Costs less Other Sales Revenues. Net Fuel Cost, the largest component of Net Base Fuel Cost, is AmerenUE's fuel and purchased cost for native load and off-system sales, less off-system energy sales revenues, as estimated using production cost modeling and assuming Taum Sauk is available.



electricity market prices used in Staff's Real Time production cost modeling for AmerenUE's Net Fuel Cost.

**Q PLEASE SUMMARIZE YOUR CONCLUSIONS AND RECOMMENDATIONS.**

A With Staff's correction to its normalized electricity market prices, MIEC does not oppose the use of Staff's Real Time production cost modeling in this proceeding to estimate AmerenUE's Net Fuel Cost provided: (1) Staff's modeling of the fuel expense for Callaway is retained and (2) the annualized refueling outage length for Callaway is decreased from 29 days to 24 days. In addition, I recommend that the Commission not allow the inclusion of AmerenUE's non-normalized contract off-system sales and purchases for 2010 in the January 31, 2010 true-up of AmerenUE's Net Base Fuel Cost.

**Q UNDER YOUR RECOMMENDATIONS, HAVE YOU ESTIMATED THE RESULTING REDUCTION IN AMERENUE'S NET BASE FUEL COST FROM THE LEVEL ORIGINALLY PROPOSED BY AMERENUE IN THE PROCEEDING?**

A Yes. Subject to any remaining necessary reasonable true-up of inputs through January 31, 2010, I estimate AmerenUE's Missouri-Jurisdictional Net Base Fuel Cost under my recommendations to be approximately \$466.4 million ( $(\$580.6M^2 - 515.2M^3 + \$437.5M^3 - \$10.6M^4) \times (\$550.0M^2/\$580.6M^2)$ ), which is a \$83.6 million reduction from the \$227 million (70%) increase in the jurisdictional Net Base Fuel Cost that AmerenUE originally proposed.

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<sup>2</sup>Schedule GSW-E20 at line 28.

<sup>3</sup>Highly Confidential Schedule JRD-13.

<sup>4</sup>Schedule GSW-E20 at line 20.



1     **AMERENUE AGREEMENT WITH STAFF PRODUCTION COST MODELING**

2     **Q     CAN YOU PLEASE SUMMARIZE MR. FINNELL'S TESTIMONY IN REGARD TO**  
3           **STAFF'S REAL TIME PRODUCTION COST MODELING OF AMERENUE'S NET**  
4           **FUEL COST?**

5     A     Yes. Mr. Finnell indicates that his review of Staff's production cost model runs  
6           showed that they produced reasonable results. He indicates the major differences  
7           between his PROSYM results and Staff's results are due to the fact Staff updated the  
8           production cost inputs. However, he does indicate that AmerenUE disagrees with  
9           Staff's assumptions in regard to fuel expenses for the Callaway nuclear plant. In  
10          addition, Mr. Finnell indicates that AmerenUE has now entered into some contract  
11          off-system sales and purchases and that these need to be modeled through the  
12          true-up cutoff date of January 31, 2010 (Rebuttal Testimony of Finnell at 2-4).

13    **Q     HOW DO YOU RESPOND TO MR. FINNELL IN REGARD TO STAFF'S**  
14          **PRODUCTION COST MODELING?**

15    A     With the electricity market price normalization correction represented in Staff witness  
16          Maloney's supplemental rebuttal testimony, MIEC does not oppose the use of Staff's  
17          production cost modeling provided in this proceeding to estimate AmerenUE's Net  
18          Fuel Cost provided: (i) Staff's modeling of the fuel expense for Callaway, which is  
19          consistent with my direct testimony recommendations, is retained and (ii) the  
20          unreasonable 29-day annualized refueling outage length assumption that has been  
21          used by AmerenUE and Staff is changed to 24 days.



1    **Q     CAN YOU PLEASE EXPLAIN MS. MALONEY'S CORRECTION TO THE**  
2           **NORMALIZED ELECTRICITY MARKET PRICES USED IN STAFF'S PRODUCTION**  
3           **COST MODELING?**

4    **A**     Yes. Ms. Maloney in her supplemental rebuttal testimony indicates she recently  
5           discovered that the normalization factors she developed for electricity market prices  
6           were understated and resulted in the electricity market prices used in the Staff's  
7           production cost modeling for AmerenUE's Net Fuel Cost being too low. This in turn  
8           understated AmerenUE's native load fuel and purchased power expense by  
9           \$1.7 million, but also understated AmerenUE's off-system sales margins such that the  
10          net impact was to overstate AmerenUE's Net Fuel Cost by \$39.3 million.  
11          (Supplemental Rebuttal Testimony of Maloney at 1-3). I have reviewed  
12          Ms. Maloney's correction and agree with it.

13   **Q     PLEASE EXPLAIN AMERENUE'S POSITION ON THE MODELING OF**  
14          **CALLAWAY'S REFUELING EXPENSE.**

15   **A**     AmerenUE continues to propose to include the nuclear fuel for Callaway Refueling  
16          Outage Number 17 in its modeled fuel cost expense for Callaway. Staff and I  
17          disagree with the inclusion of that fuel for essentially the same reason -- the fuel will  
18          not be loaded until well after the end of the true-up period in this proceeding.

19   **Q     HAS AMERENUE PRESENTED ANY NEW TESTIMONY IN AN ATTEMPT TO**  
20          **SUPPORT ITS POSITION?**

21   **A**     Yes. AmerenUE witness Irwin in rebuttal testimony argues that not including the cost  
22          for this fuel that has already been bought and paid for by AmerenUE would fail to



1 reflect the best information available and necessitate greater adjustments through  
2 AmerenUE's fuel adjustment clause Rebuttal Testimony of Irwin at 3-5).

3 In addition, Mr. Irwin indicates I failed to remove \$1.97 million in  
4 Westinghouse credits in my calculation of nuclear fuel costs (Id. at 7).

5 **Q HOW DO YOU RESPOND?**

6 A I do agree I should have removed the \$1.97 million in Westinghouse credits in my  
7 calculation of nuclear fuel costs. However, I continue to disagree with Mr. Irwin in  
8 regard to including the fuel from Callaway Refueling Number 17. It is important that  
9 all known and measurable adjustments to the test year be cut off on the same date in  
10 order to assure the relationship between revenues, expenses and rate base remain in  
11 step with one another. This is why the January 31, 2010 true-up cutoff was  
12 established in this proceeding. While nuclear fuel costs may go up after that cutoff  
13 date, changes to other AmerenUE costs or revenues contained in AmerenUE's Net  
14 Base Fuel Cost after that cutoff date may offset that increase. It cannot conclusively  
15 be said that greater adjustments through AmerenUE's fuel adjustment clause will be  
16 needed if Callaway Refueling Outage Number 17 fuel is not included in AmerenUE's  
17 Net Base Fuel Cost.

18 **Q PLEASE EXPLAIN WHY YOU CONTINUE TO DISAGREE WITH THE USE OF AN**  
19 **ANNUALIZED REFUELING OUTAGE LENGTH OF 29 DAYS FOR CALLAWAY.**

20 A While Mr. Finnell correctly points out on page 5 of his rebuttal testimony that the  
21 19-day annualized refueling outage length for Callaway I proposed in my direct  
22 testimony is too short because it is based on Callaway's shortest ever refueling  
23 outage (28 days), AmerenUE's continued use of a 29-day annualized refueling



1 outage length (based on an average refueling length of approximately 44 days) is just  
2 as flawed.

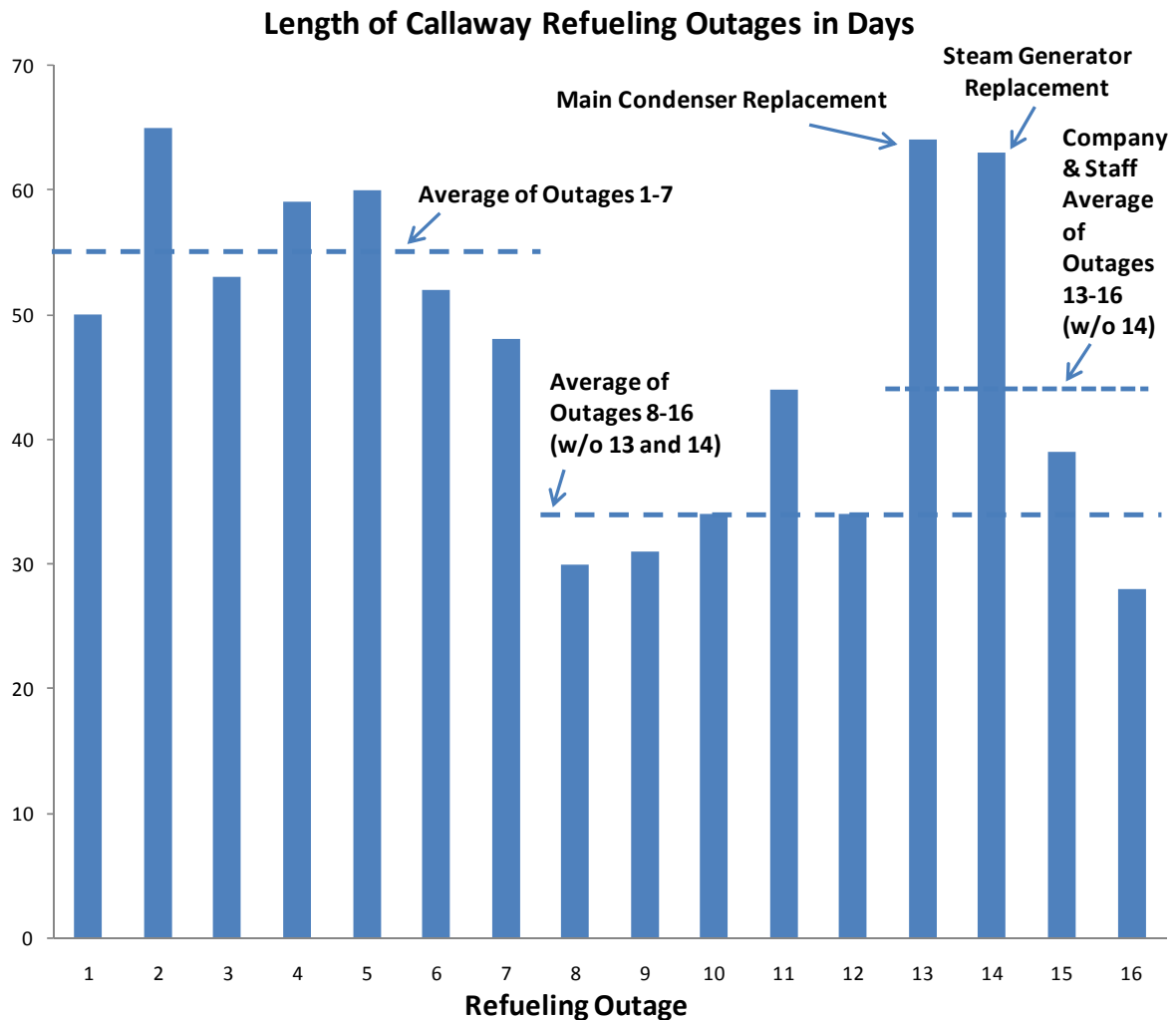
3 AmerenUE's 29-day annualized outage, which as of rebuttal testimony is still  
4 being accepted by Staff, is based on an average of only Refueling Outages  
5 13, 15 and 16 (44 days). However, Refueling Outage 13 was abnormally long  
6 (64 days) because of the need to facilitate the replacement of the Callaway main  
7 condenser prior to the AmerenUE's replacement of the Callaway steam generator.  
8 (AmerenUE response to Data Request MIEC 23-1, attached as Schedule JRD-12).  
9 Since the two remaining samples for the average refueling outage length are likely  
10 not alone a reasonable indicator of the normalized refueling outage length for  
11 Callaway, I recommend that, for this proceeding, the normalized refueling outage  
12 length for Callaway instead be based on an average of the length of Refueling  
13 Outages 8-16 excluding the two abnormally long outages (13 and 14) and the two  
14 shortest outages (8 and 16). This yields a normalized refueling outage length of  
15 36 days (or 24 days on an annualized basis).

16 Thus, I recommend an annualized refueling outage length of 24 days be used  
17 in the production cost modeling for AmerenUE's Net Fuel Cost, rather than the  
18 29 days used by AmerenUE and Staff. Performing an additional Real Time  
19 production cost model run, I have found the change in annualized outage length from  
20 29 days to 24 days reduces AmerenUE's native load Net Fuel Cost from Staff's  
21 supplemental rebuttal testimony run by approximately \$2.0 million, or \$1.9 million on  
22 a jurisdictional basis. This result is presented in detail in Highly Confidential  
23 Schedule JRD-13.



1 Q PLEASE EXPLAIN WHY YOU HAVE EXCLUDED CALLAWAY REFUELING  
2 OUTAGES 1-7 FROM YOUR AVERAGING.

3 A The Figure below, which is similar to the one shown on page 6 of Mr. Finnell's  
4 rebuttal testimony, shows the length of Callaway Refueling Outages 1-16.



5 As can be seen from the figure above, putting Callaway Refueling Outages 13 (main  
6 condenser replacement) and 14 (steam generator replacement) aside, Refueling  
7 Outages 1-7, which took place over 14 years ago, were generally significantly longer  
8 in length than those that have since occurred. Specifically, Outages 1-7 lasted from



1 48 to 65 days (approximately 55 days on average), while those since (except for  
2 outages 13 and 14) lasted from 29 to 44 days (approximately 34 days on average).  
3 Therefore, it is inappropriate to include Refueling Outages 1-7 in the averaging for the  
4 normalization since the length of those long past outages is not indicative of  
5 AmerenUE's refueling outage performance over the past 14 years.

6 **INCLUSION ON CONTRACT OFF-SYSTEM SALES**  
7 **AND PURCHASES IN THE THROUGH**  
8 **JANUARY 31, 2010 TRUE-UP OF NET BASE FUEL COST**

9 **Q CAN YOU PLEASE EXPLAIN AMERENUE'S POSITION IN REGARD TO THE**  
10 **INCLUSION OF ACTUAL 2010 CONTRACT OFF-SYSTEM SALES AND**  
11 **PURCHASES IN THE JANUARY 31, 2010 TRUE-UP OF NET BASE FUEL COST?**

12 **A** Yes. As I noted earlier, AmerenUE proposes to include its actual contract off-system  
13 sales and purchases for 2010 as of the January 31, 2010 true-up cut-off date  
14 (Rebuttal Testimony of Finnell at 3-4).

15 **Q HOW DO YOU RESPOND?**

16 **A** I oppose their inclusion because their inclusion would not be representative of the  
17 normalized price and volume of AmerenUE's contract off-system sales and  
18 purchases. In this proceeding, the electricity market prices being used in the  
19 production cost modeling for Net Fuel Cost are normalized based on a three year  
20 average of historical market prices. The prices for the contract off-system sales and  
21 purchases are from a single year (2010). Highly Confidential Schedule JRD-14  
22 shows a comparison of Staff's normalized electricity market prices versus the prices  
23 for AmerenUE's 2010 contract off-system sales and purchases. The schedule shows  
24 that the 2010 contract prices are \*\*\*\*\* than Staff's Supplemental



1 Rebuttal Testimony normalized electricity market prices. Considering AmerenUE  
2 makes far more off-system sales than purchases, including AmerenUE's  
3 non-normalized contract off-system sales and purchases in the January 31, 2010  
4 true-up of Net Base Fuel Cost would significantly overstate AmerenUE's Net Base  
5 Fuel Cost. As such, AmerenUE should not be allowed to do so.

## 6 **CONCLUSIONS AND RECOMMENDATIONS**

7 **Q CAN YOU PLEASE SUMMARIZE YOUR CONCLUSIONS AND**  
8 **RECOMMENDATIONS?**

9 A With Staff's correction to its normalized electricity market prices, MIEC does not  
10 oppose the use of Staff's Real Time production cost modeling in this proceeding to  
11 estimate AmerenUE's Net Fuel Cost provided: (1) Staff's modeling of the fuel  
12 expense for Callaway is retained and (2) the annualized refueling outage length for  
13 Callaway is decreased from 29 days to 24 days. In addition, I recommend that the  
14 Commission not allow the inclusion of AmerenUE's non-normalized contract  
15 off-system sales and purchases for 2010 in the January 31, 2010 true-up of  
16 AmerenUE's Net Base Fuel Cost.

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

18 A Yes, it does.

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**AmerenUE**  
**Response to MIEC Data Request**  
**MPSC Case No. ER-2010-0036**  
**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**

Data Request No.: MIEC 23-1 Diana Vuylsteke

Please refer to the rebuttal testimony of Mr. Finnell at pages 4-6. Please describe in detail why Callaway's refueling outage Number 13 was substantially longer in length than Callaway's refueling outages Number 8-12 and 15-16.

**RESPONSE**

**Prepared By: Patrick McKenna**

**Title: Outage Manager**

**Date: 2/20/10**

Fourteen modifications were scheduled for Refuel 13. One modification was to the main condenser which took 44 days. It was necessary to replace the main condenser because the tubes were made of a copper alloy. Corrosion of the copper tubes results in copper in the water going to the steam generators. Copper in the steam generators causes corrosion in the steam generator tubes. We were replacing steam generators in Refuel 14 so to make the steam generators last as long as possible we needed to keep copper out of the new steam generators. Refuel 8 -12 and 15-16 did not have any modifications of that duration.



**Schedules JRD-13 and JRD-14  
are  
Highly Confidential  
in their entirety  
and have been omitted**