

Exhibit No.:
Witness: James R. Dauphinais
Type of Exhibit: Direct 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

Case No. ER-2010-0036
Tariff Nos. YE-2010-0054
and YE-2010-0055

Direct Testimony and Schedules of

James R. Dauphinais

Revenue Requirement

NON-PROPRIETARY VERSION

On behalf of

Missouri Industrial Energy Consumers

December 18, 2009



BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

Project 9187

MIFC Exhibit No. 416
Date 3-24-10 Reporter XF
File No. ER-2010-0036

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STATE OF MISSOURI)
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 is my direct 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
James R. Dauphinais

Subscribed and sworn to before me this 17th day of December, 2009.



Maria E. Decker
Notary Public

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and YE-2010-0055

Direct Testimony of James R. Dauphinais

1 **I. Introduction**

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

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

5 **Q WHAT IS YOUR OCCUPATION?**

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

8 **Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.**

9 **A This information is included in Appendix A to my testimony.**

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

11 **A This testimony is presented on behalf of the Missouri Industrial Energy Consumers**
12 ("MIEC"). Member companies purchase substantial quantities of electricity from
13 AmerenUE.

**James R. Dauphinais
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1 **Q HAVE YOU PRESENTED TESTIMONY IN PRIOR PROCEEDINGS BEFORE THE**
2 **MISSOURI PUBLIC SERVICE COMMISSION (COMMISSION)?**

3 **A** Yes. I have been involved in a number of proceedings before this Commission
4 including, but not limited to, Case Nos. ER-2007-0002 and ER-2008-0318 where I
5 testified in regard to AmerenUE's fuel cost and off-system sales.

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

7 **A** My testimony addresses AmerenUE's proposed Net Base Fuel Cost that it proposes
8 to include in its proposed revenue requirement. Specifically, I address the
9 reasonableness of (i) AmerenUE's PROSYM production cost simulation inputs, (ii)
10 AmerenUE's proposed net Load and Generation Forecast Deviation cost and (iii)
11 AmerenUE's annualization of historical MISO ancillary service revenues.

12 The fact I do not address a particular issue should not be interpreted as
13 approval of any position taken by AmerenUE.

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

15 **A** I recommend that the Commission reduce AmerenUE's proposed Net Base Fuel Cost
16 (and, thus, its proposed revenue requirement) by not less than \$48.6 million to
17 correct: (i) AmerenUE's unreasonable PROSYM inputs regarding nuclear fuel cost,
18 Callaway refueling outage length, highway diesel fuel costs and hourly weather
19 normalized loads; (ii) AmerenUE's unreasonable estimate of its net Load and
20 Generation Forecast Deviation costs; and (iii) AmerenUE's unreasonable
21 annualization of historical MISO ancillary service revenues. On a Missouri retail
22 jurisdictional basis, this would reduce AmerenUE's proposed Net Base Fuel Cost and
23 revenue requirement by \$46.2 million.

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1 **Q CAN YOU PLEASE EXPLAIN THE TERM NET BASE FUEL COST?**

2 A Yes. AmerenUE's Net Base Fuel Cost is the portion of AmerenUE's revenue
3 requirement that is tracked through its Fuel Adjustment Clause. It consists of three
4 major components:

5 – **Net Fuel Cost** – Fuel and purchased power costs for native load and off-system
6 sales, less off-system energy sales revenues, as estimated using production cost
7 modeling and assuming Taum Sauk is available.

8 Plus

9 – **Other Fuel and Purchased Power Costs** – Net cost of generation and load
10 forecast deviation costs, fuel additive costs, net fly ash expenses, fixed gas
11 supply costs, credits from Westinghouse related to a prior nuclear fuel settlement,
12 MISO Day 2 expenses, PJM expenses, Account 565 transmission expenses,
13 MISO ancillary service costs and the cost of purchased power to serve common
14 boundary customers.

15 Less

16 – **Other Sales Revenues** – Off-system capacity sales (assuming Taum Sauk is
17 available), MISO ancillary service revenues, MISO RSG Make Whole Payment
18 margins and miscellaneous MISO revenues.

19 (Direct Testimony of Weiss at 31-32, Direct Testimony of Finnell at 1-4 and Direct
20 Testimony of Haro at 4-6).

21 **Q ON WHAT STANDARD SHOULD THE COMMISSION IN THIS PROCEEDING SET**
22 **AMERENUE'S NET BASE FUEL COST COMPONENT OF ITS REVENUE**
23 **REQUIREMENT?**

24 A It should be set on the same standard as the remainder of AmerenUE's revenue
25 requirement. Specifically, it should be set in this proceeding based on AmerenUE's
26 actual costs during the historic test year ending March 31, 2009 adjusted for known
27 and measurable changes from the true-up period that ends January 31, 2010 and
28 normalized to annualize periodic expenses and address abnormalities such as annual
29 swings in weather and commodity market prices.

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1 **Q WHAT IS THE TOTAL ANNUAL NET BASE FUEL COST THAT AMERENUE IS**
2 **PROPOSING IN THIS PROCEEDING?**

3 A AmerenUE is proposing a Net Base Fuel Cost of approximately \$581 million
4 (\$550 million on a Missouri retail jurisdictional basis). This consists of a Net Fuel
5 Cost of \$515 million plus Other Fuel and Purchased Power Costs of \$87 million less
6 Other Sales Revenues of approximately \$21 million (Schedule GSW-E20, Direct
7 Testimony of Finnell at 2-3 and Direct Testimony of Haro at 6). As Mr. Weiss
8 indicates, the proposed jurisdictional amount is a \$227 million (70%) increase from
9 the jurisdictional Net Base Fuel Cost approved by the Commission for AmerenUE in
10 Case No. ER-2008-0318. AmerenUE largely attributes this extraordinarily large
11 increase to the significant drop in wholesale electricity prices that began in the fall of
12 2008. These lower prices, which are reflected in AmerenUE's three year average of
13 historic market prices that it uses in its production cost simulations, has led to a very
14 large drop in the estimated off-system energy sales margins that offset the native
15 load fuel and purchased power portion of AmerenUE's Net Fuel Cost.

16 **Q CAN YOU PLEASE DESCRIBE YOUR REVIEW OF AMERENUE'S PROPOSED**
17 **NET BASE FUEL COST AMOUNT?**

18 A Yes. I reviewed the direct testimony and schedules of AmerenUE witnesses Finnell,
19 Haro and Weiss in regard to Net Base Fuel Cost. I also reviewed AmerenUE's
20 response to data requests in this proceeding that relate to the issue. I worked with
21 Staff on Staff's development, with the cooperation of AmerenUE, of a working version
22 of a production cost model database for the AmerenUE system using RealTime
23 production cost software of The Emelar Group. The development of this production
24 cost model allowed Brubaker & Associates, Inc. ("BAI") to use the RealTime

1 production cost software to calculate the estimated impact on Net Fuel Cost from
2 correcting the inputs AmerenUE used in its own PROSYM production cost modeling
3 that I identified as being unreasonable. Finally, I applied my experience to the
4 information available in considering the reasonableness of AmerenUE's proposed Net
5 Base Fuel Cost amount. As I have noted, I have found issues with a number of
6 AmerenUE's production cost input assumptions, AmerenUE's estimate of its net Load
7 and Generation Forecast Deviation costs, and AmerenUE's annualization of MISO
8 ancillary service revenues.

9 **II. Issues with AmerenUE's Production Cost Inputs**

10 **Q CAN YOU PLEASE EXPLAIN WHAT PRODUCTION COST MODELING IS AND**
11 **HOW IT IS BEING USED IN THIS PROCEEDING?**

12 **A** Yes. As Mr. Finnell indicated in his direct testimony, production cost modeling allows
13 the simulation of an electric utility's generation system and load obligations. The
14 costs for fuel, heat rate of generators, hourly market price, generation outage
15 assumptions, hourly loads and many other items are input into the model. The model
16 then performs a commitment and dispatch of generation to meet hourly load
17 obligations. In addition, the model makes use of the hourly market prices and forward
18 contracts that are input into the model to estimate hourly off-system energy
19 purchases and sales. In this proceeding, AmerenUE is using production cost
20 modeling to estimate its Net Fuel Cost using normalized loads and market prices.

1 **Q CAN YOU PLEASE DESCRIBE THE REALTIME PRODUCTION COST MODEL**
2 **AND HOW YOU HAVE USED IT IN THIS PROCEEDING?**

3 A Yes. RealTime is a production cost software package similar to the PROSYM
4 production cost software package used by AmerenUE. It is a product of The Emelar
5 Group. Both RealTime and PROSYM are competent models for estimating utility
6 production cost. In Case No. ER-2008-0318, it was shown by the Commission Staff
7 and accepted by AmerenUE that the RealTime software can produce substantially
8 the same results for AmerenUE's Net Fuel Cost as the PROSYM software used by
9 AmerenUE when inputs to both production cost models are substantially the same.

10 The Commission Staff has been using the RealTime software for over
11 10 years in respect to electrical corporations over which the Commission has
12 ratemaking jurisdiction. The Commission Staff used the RealTime software in
13 AmerenUE's general electric rate proceedings (i.e., Case Nos. ER-2007-0002 and
14 ER-2008-0318) in order to examine the reasonableness of AmerenUE's projections of
15 its Net Fuel Cost.

16 In this proceeding, I have used the RealTime software to estimate how
17 AmerenUE's proposed Net Fuel Cost will change when certain assumptions I have
18 deemed unreasonable are corrected. It is my understanding the Commission Staff is
19 intending to use the RealTime software for a similar purpose in this proceeding.

20 **Q WHAT HAS BEEN DONE IN THIS PROCEEDING TO ENSURE THE REALTIME**
21 **MODEL PROVIDES RESULTS SIMILAR TO THAT WHICH WOULD BE PROVIDED**
22 **BY THE PROSYM MODEL?**

23 A The Commission Staff, in coordination with me and with the cooperation of
24 AmerenUE, developed a RealTime model database for this proceeding based on the

1 inputs AmerenUE used for its Net Fuel Cost PROSYM model runs in this proceeding.
2 This RealTime case, which I will refer to as the "Staff Benchmark Case", projected a
3 Net Fuel Cost within \$2.6 million (0.5%) of the Net Fuel Cost projected by AmerenUE
4 through its PROSYM run for its Net Fuel Cost. A copy of the highly confidential
5 RealTime database model for the Staff Benchmark case was provided to MIEC in
6 Staff's Highly Confidential Response to Data Request MIEC-Staff-1-2 that was made
7 to Staff by MIEC.

8 **Q FROM YOUR REVIEW OF AMERENUE'S INPUTS TO ITS PRODUCTION COST**
9 **MODEL FOR ITS PROPOSED NET FUEL COST, WHICH INPUTS HAVE YOU**
10 **FOUND UNREASONABLE?**

11 **A** I have found the following inputs unreasonable:

- 12 • AmerenUE's basing of nuclear fuel costs on the average nuclear fuel cost
13 associated with Callaway Refueling Number 17.
- 14 • AmerenUE's assumption that its refueling outages for the Callaway nuclear unit
15 will last 45 days (29 days on an annualized basis).
- 16 • AmerenUE's use of an assumed 2010 price for its On Highway Diesel (OHD) fuel
17 cost for the rail transportation of coal to its coal-fired generation facilities.
- 18 • AmerenUE's application of weather normalized loads to its calendar year 2007
19 actual hourly loads.

20 **Q HAVE YOU CALCULATED THE ADJUSTMENT TO AMERENUE'S NET FUEL**
21 **COST THAT WOULD RESULT FROM CORRECTING THESE INPUTS?**

22 **A** Yes. The total adjustment would be a \$41.3 million reduction to AmerenUE's
23 proposed Net Fuel Cost, which would result in the same reduction to AmerenUE's Net
24 Base Fuel Cost. This consists of a \$18.0 million reduction to correct AmerenUE's
25 nuclear fuel cost, a \$7.7 million reduction to correct AmerenUE's Callaway refueling

1 outage length, a \$6.1 million reduction to correct AmerenUE's On Highway Diesel fuel
2 cost and a \$9.5 million reduction to correct AmerenUE's application of its weather
3 normalized loads to its historic calendar year 2007 hourly loads.

4 A. *Nuclear Fuel Cost*

5 Q PLEASE EXPLAIN WHY YOU FIND AMERENUE'S BASING OF NUCLEAR FUEL
6 COSTS ON THE AVERAGE NUCLEAR FUEL COST ASSOCIATED WITH
7 CALLAWAY REFUELING NUMBER 17 UNREASONABLE?

8 A While it is correct, as indicated on page 9 of Mr. Finnell's Direct Testimony, that the
9 nuclear fuel for Callaway Refueling Number 17 will be on site in December 2009, the
10 fuel will not be loaded for use by the Callaway Unit until *****
11 ***** after the end of the true-up period in this proceeding (AmerenUE's
12 Highly Confidential Response to Staff's Data Request 45, attached as Highly
13 Confidential Schedule JRD-1). Therefore, the nuclear fuel for Refueling Number 17
14 cannot reasonably be included as a known and reasonable adjustment to the test
15 period for this proceeding as it falls well outside of the true-up period.

16 Q HOW DID YOU CALCULATE YOUR NUCLEAR FUEL COST ADJUSTMENT TO
17 AMERENUE'S NET FUEL COST?

18 A I took AmerenUE's actual and projected per unit nuclear fuel cost over the period of
19 February 2009 to January 2010 that was provided in the Highly Confidential
20 Response to Staff's Data Request 65¹ and input that into the RealTime Staff
21 Benchmark Case in place of the per unit nuclear fuel cost assumed by AmerenUE.
22 The resulting rerun of the RealTime model exhibited an \$18.0 million reduction in

¹However, I removed a non-reoccurring adder to the monthly per unit fuel amounts for March and April of 2009.

1 AmerenUE's Net Fuel Cost versus that in the Staff Benchmark Case. This is
2 summarized in greater detail in Highly Confidential Schedule JRD-2. I have attached
3 a copy of AmerenUE's Highly Confidential Response to Staff's Data Request 65 as
4 my Highly Confidential Schedule JRD-3.

5 *B. Callaway Nuclear Unit Refueling Outage Length*

6 **Q PLEASE EXPLAIN WHY YOU FIND AMERENUE'S ASSUMPTION THAT ITS**
7 **CALLAWAY NUCLEAR UNIT REFUELING OUTAGES WILL LAST 45 DAYS IS**
8 **UNREASONABLE?**

9 **A** In Response to Staff's Data Request 45, AmerenUE indicated its Refuel 16 for
10 Callaway only lasted approximately **** days and its projected duration of Callaway
11 Refuel 17 is ***** days (Highly Confidential Schedule JRD-1). This is far less than
12 45 days AmerenUE assumed to develop its annualized refueling outage length of 29
13 days that it used in its PROSYM production cost run for Net Fuel Cost. Therefore, it
14 is not reasonable to assume a 45 day refueling outage for Callaway.

15 **Q HOW DID YOU CALCULATE YOUR CALLAWAY REFUELING OUTAGE**
16 **ADJUSTMENT TO AMERENUE'S NET FUEL COST?**

17 **A** I input an annualized refueling outage length of 19 days (approximately 12/18 of 28
18 days) into the RealTime Staff Benchmark case with my previously discussed nuclear
19 fuel adjustment in place. The resulting rerun of the RealTime model exhibited a net
20 fuel cost reduction of \$7.7 million versus the Staff Benchmark Case with only my
21 nuclear fuel adjustment in place. This is summarized in greater detail in Highly
22 Confidential Schedule JRD-2.

1 C. *On Highway Diesel (OHD) Fuel Cost*
2 *Associated with Rail Transportation of Coal*

3 Q PLEASE EXPLAIN WHY YOU FIND AMERENUE'S ASSUMED ON HIGHWAY
4 DIESEL FUEL COST FOR RAIL TRANSPORTATION UNREASONABLE?

5 A The assumption is a deviation from AmerenUE's test year OHD fuel cost and is not a
6 known and measurable change from the true-up period. In Response to Staff's Data
7 Requests 55 and 273 (attached as High Confidential Schedules JRD-4 and JRD-5),
8 AmerenUE identified the OHD prices it assumed as being estimates for 2010. They
9 are not based on fixed contract OHD prices for 2010 or an estimate of OHD prices for
10 the last twelve months of the true-up period.

11 Q WHAT DO YOU RECOMMEND IN REGARD TO OHD PRICING?

12 A I recommend that, at the time of the true-up in this proceeding, OHD pricing be set at
13 AmerenUE's actual per unit OHD costs for the twelve months ending
14 January 30, 2010. This will appropriately capture known and measurable changes in
15 this cost through the end of the true-up period.

16 Q DO YOU HAVE A PROXY ADJUSTMENT THAT YOU PROPOSE AS A
17 PLACEHOLDER TO ACCOUNT FOR YOUR RECOMMENDATION?

18 A I took AmerenUE's OHD price assumption from its previous rate proceeding before
19 the Commission and input that into the RealTime Staff Benchmark Case with my
20 previously discussed nuclear fuel and Callaway refueling outage adjustments in
21 place. The resulting rerun of the RealTime model exhibited a \$6.1 million reduction in
22 AmerenUE's Net Fuel Cost versus that in the Staff Benchmark Case with only my
23 nuclear fuel and Callaway refueling outages adjustment in place. This is summarized
24 in greater detail in Highly Confidential Schedule JRD-2. As noted above, at the time

1 of the true-up in this proceeding, AmerenUE's OHD price should be set at
2 AmerenUE's actual per unit OHD costs for the 12 months ending January 31, 2010.

3 *D. Hourly Weather Normalized Loads*

4 **Q PLEASE EXPLAIN WHY YOU FIND AMERENUE'S APPLICATION OF WEATHER**
5 **NORMALIZED LOADS TO AMERENUE'S HISTORIC CALENDAR YEAR 2007**
6 **HOURLY LOADS TO BE UNREASONABLE?**

7 **A** The hourly load data input by AmerenUE into its PROSYM production cost modeling
8 used to estimate its Net Fuel Cost was developed by Mr. Finnell by using the
9 PROSYM LoadFarm program to apply AmerenUE witness Mr. Wills' weather
10 normalized loads to AmerenUE's calendar year 2007 hourly load (AmerenUE's Highly
11 Confidential Response to Data Request MIEC 10-1 attached as Highly Confidential
12 Schedule JRD-6). I compared the ratio of on-peak energy to off-peak energy in the
13 hourly weather normalized loads provided by Mr. Wills to the on-peak to off-peak ratio
14 of the hourly loads utilized by Mr. Finnell as an input to his PROSYM model run for
15 Net Fuel Cost.² I found that Mr. Finnell's hourly load data had a higher on-peak to
16 off-peak ratio than that of Mr. Wills' hourly weather normalized loads (Highly
17 Confidential Schedule JRD-7). I also found that when I looked at historical hourly
18 load data for AmerenUE for calendar years 2006 and 2008, that this historical hourly
19 load data had an on-peak to off-peak ratio that was comparable to that in Mr. Wills'
20 weather normalized hourly loads (Id.). Finally, I found that even the historical hourly
21 load data for AmerenUE for calendar year 2007 had a lower on-peak to off-peak ratio
22 than Mr. Finnell's hourly load data (Id.). Thus, I concluded that the application of Mr.
23 Wills' weather normalized loads to AmerenUE's historical calendar year 2007 hourly

²For purpose of this comparison only, I defined on-peak as 6 AM through 10 PM during all days of the year and off-peak as the remaining hours of the year.

1 loads through the PROSYM LoadFarm program was not reasonable in respect to the
2 ratio of on-peak to off-peak energy.

3 **Q HOW DID YOU CALCULATE YOUR HOURLY LOAD ADJUSTMENT TO**
4 **AMERENUE'S NET FUEL COST?**

5 A A computer algorithm was developed to adjust the hourly loads that were produced
6 by the PROSYM LoadFarm program so they matched the on-peak to off-peak ratio of
7 Mr. Wills' weather normalized hourly loads while retaining the monthly energy,
8 monthly peak and calendar year 2007 load shape characteristics of PROSYM
9 LoadFarm hourly loads. I then input these adjusted hourly loads into the Staff
10 Benchmark Case with my previously discussed nuclear fuel, Callaway refueling
11 outage, and OHD fuel adjustments in place. The resulting rerun of the RealTime
12 model exhibited a Net Fuel Cost reduction of \$9.5 million versus the Staff Benchmark
13 Case with only my nuclear fuel, Callaway refueling outage and OHD adjustments in
14 place. I have attached a comparison of Mr. Wills' hourly weather normalized loads,
15 the PROSYM LoadFarm hourly loads and my adjusted hourly loads as Highly
16 Confidential Schedule JRD-8.

1 **III. AmerenUE's Proposed Net**
2 **Generation and Load Forecast Deviation Cost Adder**

3 **Q CAN YOU PLEASE EXPLAIN WHAT IS AMERENUE'S NET GENERATION AND**
4 **LOAD FORECAST ERROR ADDER?**

5 A Yes. This adder, which is referred to as the Load and Generation Forecast Deviation
6 in Mr. Weiss' Schedule GSW-E20, is one of AmerenUE's Other Fuel and Purchased
7 Power Costs.

8 The PROSYM production cost model runs performed by AmerenUE are based
9 on MISO day-ahead Locational Marginal Prices ("LMP"). To the extent AmerenUE's
10 actual generation and load levels deviate in the MISO real-time market from the
11 amounts AmerenUE cleared in the MISO day-ahead market, those deviations will be
12 settled at MISO real-time LMPs rather than MISO day-ahead LMPs. As Mr. Finnell
13 explains on pages 11-12 of his direct testimony, AmerenUE's Load and Generation
14 Forecast Deviation amount is designed to account for the extra revenues and
15 expenses introduced by this price settlement.

16 **Q WHY DO YOU FIND AMERENUE'S PROPOSED LOAD AND GENERATION**
17 **FORECAST DEVIATION AMOUNT UNREASONABLE?**

18 A My review of Mr. Haro's workpaper "Load and Generation Forecast Err" of the file
19 "Haro_Data_061609_Rev2_workpapers.xls." that is associated with AmerenUE's
20 proposed Load and Generation Forecast Deviation amount revealed that AmerenUE
21 has based its proposed net Load and Generation Forecast Deviation cost on an
22 annualization of the net Load and Generation Forecast Deviation cost AmerenUE
23 actually incurred during the 17 month period ending May 31, 2009. The problem with
24 using an annualization of this 17 month period is that there have been changes to the

1 MISO market over that 17 month period that may have significantly affected the
2 difference between MISO day-ahead and real-time LMPs. These include changes in
3 regard to the way MISO RSG charges are assessed to market participants and the
4 January 6, 2009 start of the MISO Ancillary Services Market ("ASM"). In fact, a
5 comparison of the first five months of 2009 versus the first five months of 2008 reveal
6 that AmerenUE's actual average net Load and Generation Forecast Deviation cost
7 fell by approximately 75% for that five month period in 2009 versus the same period
8 in 2008 (Highly Confidential Schedule JRD-9).

9 **Q WHAT DO YOU RECOMMEND IN ORDER TO ADDRESS THIS CHANGE?**

10 **A** I recommend that, at the time of the true-up in this proceeding, AmerenUE's Net Load
11 and Generation Forecast Deviation cost be set at its actual net Load and Generation
12 Forecast Deviation cost for the 12 months ending January 31, 2010. This will
13 appropriately capture the known and measurable changes in this cost through the
14 end of the true-up period.

15 **Q DO YOU HAVE A PROXY ADJUSTMENT THAT YOU PROPOSE AS A**
16 **PLACEHOLDER TO ACCOUNT FOR YOUR RECOMMENDATION?**

17 **A** Yes. From Mr. Haro's workpapers, I have calculated AmerenUE's actual Load and
18 Generation Forecast Deviation for calendar year 2008 to be \$14.1 million. I then
19 reduced this amount by 75% to reflect the fall in the net forecast deviation cost in the
20 first five months of 2009 versus the first five months of 2008. This calculation, which
21 is shown in Highly Confidential Schedule JRD-10, yields a Load and Generation
22 Forecast Deviation amount of \$3.6 million, which is \$7.0 million less than the
23 \$10.6 million amount proposed by AmerenUE in this proceeding. Therefore, I am

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1 recommending that AmerenUE's Net Base Fuel Cost be reduced by \$7.0 million as a
2 placeholder to correct for the unreasonableness of AmerenUE's proposed net Load
3 and Generation Forecast Deviation cost. As noted above, at the time of the true-up in
4 this proceeding, AmerenUE's net Load and Generation Deviation cost should be
5 revisited and set to AmerenUE's actual historic net Load and Generation Deviation
6 cost for the 12 months ending January 31, 2010.

7 **IV. AmerenUE's Annualization of**
8 **Historical MISO Ancillary Service Revenues**

9 **Q CAN YOU PLEASE EXPLAIN WHAT ARE MISO ANCILLARY SERVICE**
10 **REVENUES?**

11 **A** These are the revenues AmerenUE earns from MISO for AmerenUE's generation that
12 clears in the MISO Ancillary Services Market ("ASM") for regulation, spinning
13 generating reserves and supplemental operating reserves. These MISO revenues
14 did not exist prior to the January 6, 2009 start of the MISO ASM. These revenues are
15 part of AmerenUE's Other Sales Revenues component of its Net Base Fuel Cost.

16 **Q WHY DO YOU FIND AMERENUE'S ANNUALIZATION OF ITS HISTORICAL MISO**
17 **ANCILLARY SERVICE REVENUES UNREASONABLE?**

18 **A** My review of Mr. Haro's workpaper "UE ASM AS OF 053109.xls", in which
19 AmerenUE's actual January through May 2009 ancillary service revenues (Account
20 447) and ancillary service expenses (Account 555) are annualized, contains an error.
21 In the workpaper, AmerenUE's ancillary service expenses are correctly annualized by
22 applying the average of the historical January through May 2009 MISO ancillary
23 service expenses as the estimated monthly MISO ancillary service expense for June

1 through December of 2009. However, for the annualization of its ancillary service
2 revenues, AmerenUE apparently accidentally miscopied the formula that averages
3 historical January through May MISO ancillary service revenues such that it
4 incorrectly estimates the monthly MISO ancillary service revenues for July through
5 December 2009 as the average of the proceeding five months. For example, for
6 September 2009, rather than estimating the September 2009 MISO ancillary service
7 revenues as the average of the historical January through May 2009 MISO ancillary
8 service revenues, the workpaper incorrectly estimates the September 2009 MISO
9 ancillary service revenues as the average of the historical April through May 2009
10 MISO ancillary service revenues and the June through July estimated MISO ancillary
11 service revenues.

12 **Q WHAT DO YOU RECOMMEND IN ORDER TO ADDRESS THIS CHANGE?**

13 A I recommend that, at the time of the true-up in this proceeding, AmerenUE's MISO
14 ancillary service revenues should be set at its actual MISO ancillary service revenues
15 for the 12 months ending January 31, 2010. This will appropriately capture the
16 known and measurable change in this cost through the end of the true-up period.

17 **Q DO YOU HAVE A PROXY ADJUSTMENT THAT YOU PROPOSE AS A**
18 **PLACEHOLDER TO ACCOUNT FOR YOUR RECOMMENDATION?**

19 A Yes. I have corrected AmerenUE's "UE ASM AS OF 053109.xls" workpaper such
20 that AmerenUE's MISO ancillary service revenues are annualized on the same basis
21 as AmerenUE's MISO ancillary service expenses. This calculation, which is
22 summarized in my Highly Confidential Schedule JRD-11, resulted in a \$0.25 million
23 placeholder reduction in AmerenUE's annualized MISO ancillary service revenues

1 and a corresponding \$0.25 million placeholder reduction in AmerenUE's proposed
2 Net Base Fuel Cost. As noted above, at the time of the true-up in this proceeding,
3 the AmerenUE's MISO ancillary service revenues should be revisited and set to
4 AmerenUE's actual historic MISO ancillary service revenues for the 12 months ending
5 January 31, 2010.

6 **V. Conclusions and Recommendations**

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

8 **A** I recommend that the Commission reduce AmerenUE's proposed Net Base Fuel Cost
9 (and, thus, its proposed revenue requirement) by not less than \$48.6 million to
10 correct: (i) AmerenUE's unreasonable PROSYM inputs regarding nuclear fuel cost,
11 Callaway refueling outage length, highway diesel fuel costs and hourly weather
12 normalized loads; (ii) AmerenUE's unreasonable estimate of its net Load and
13 Generation Forecast Deviation costs; and (iii) AmerenUE's unreasonable
14 annualization of historical MISO ancillary service revenues. On a Missouri retail
15 jurisdictional basis, this would reduce AmerenUE's proposed Net Base Fuel Cost and
16 revenue requirement by \$46.2 million.

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

18 **A** Yes, it does.

Qualifications of James R. Dauphinais

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

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

4 **Q PLEASE STATE YOUR OCCUPATION.**

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

7 **Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
8 **EXPERIENCE.**

9 A I graduated from Hartford State Technical College in 1983 with an Associate's Degree
10 in Electrical Engineering Technology. Subsequent to graduation I was employed by
11 the Transmission Planning Department of the Northeast Utilities Service Company as
12 an Engineering Technician.

13 While employed as an Engineering Technician, I completed undergraduate
14 studies at the University of Hartford. I graduated in 1990 with a Bachelor's Degree in
15 Electrical Engineering. Subsequent to graduation, I was promoted to the position of
16 Associate Engineer. Between 1993 and 1994, I completed graduate level courses in
17 the study of power system transients and power system protection through the
18 Engineering Outreach Program of the University of Idaho. By 1996 I had been
19 promoted to the position of Senior Engineer.

20 In the employment of the Northeast Utilities Service Company, I was
21 responsible for conducting thermal, voltage and stability analyses of the Northeast
22 Utilities' transmission system to support planning and operating decisions. This

1 involved the use of load flow and power system stability computer simulations.
2 Among the most notable achievements I had in this area include the solution of a
3 transient stability problem near Millstone Nuclear Power Station, and the solution of a
4 small signal (or dynamic) stability problem near Seabrook Nuclear Power Station. In
5 1993 I was awarded the Chairman's Award, Northeast Utilities' highest employee
6 award, for my work involving stability analysis in the vicinity of Millstone Nuclear
7 Power Station.

8 From 1990 to 1997 I represented Northeast Utilities on the New England
9 Power Pool Stability Task Force. I also represented Northeast Utilities on several
10 other technical working groups within the New England Power Pool ("NEPOOL") and
11 the Northeast Power Coordinating Council ("NPCC"), including the 1992-1996 New
12 York-New England Transmission Working Group, the Southeastern
13 Massachusetts/Rhode Island Transmission Working Group, the NPCC CPSS-2
14 Working Group on Extreme Disturbances and the NPCC SS-38 Working Group on
15 Interarea Dynamic Analysis. This latter working group also included participation
16 from a number of ECAR, PJM and VACAR utilities.

17 In addition to my technical responsibilities, I was also responsible for oversight
18 of the day-to-day administration of Northeast Utilities' Open Access Transmission
19 Tariff. This included the creation of Northeast Utilities' pre-FERC Order No. 889
20 transmission electronic bulletin board and the coordination of Northeast Utilities'
21 transmission tariff filings prior to and after the issuance of Federal Energy Regulatory
22 Commission ("FERC" or "Commission") FERC Order No. 888. I was also responsible
23 for spearheading the implementation of Northeast Utilities' Open Access Same-Time
24 Information System and Northeast Utilities' Standard of Conduct under FERC Order
25 No. 889. During this time I represented Northeast Utilities on the Federal Energy

1 Regulatory Commission's "What" Working Group on Real-Time Information Networks.
2 Later I served as Vice Chairman of the NEPOOL OASIS Working Group and Co-
3 Chair of the Joint Transmission Services Information Network Functional Process
4 Committee. I also served for a brief time on the Electric Power Research Institute
5 facilitated "How" Working Group on OASIS and the North American Electric Reliability
6 Council facilitated Commercial Practices Working Group.

7 In 1997 I joined the firm of Brubaker & Associates, Inc. The firm includes
8 consultants with backgrounds in accounting, engineering, economics, mathematics,
9 computer science and business. Since my employment with the firm, I have
10 presented testimony before the Federal Energy Regulatory Commission in
11 Consumers Energy Company, Docket No. OA96-77-000, Midwest Independent
12 Transmission System Operator, Inc., Docket No. ER98-1438-000, Montana Power
13 Company, Docket No. ER98-2382-000, Inquiry Concerning the Commission's Policy
14 on Independent System Operators, Docket No. PL98-5-003, SkyGen Energy LLC v.
15 Southern Company Services, Inc., Docket No. EL00-77-000, Alliance Companies, et
16 al., Docket No. EL02-65-000, et al., Entergy Services, Inc., Docket No.
17 ER01-2201-000, and Remedying Undue Discrimination through Open Access
18 Transmission Service and Standard Electricity Market Design, Docket No.
19 RM01-12-000. I have also presented testimony before the Connecticut Department
20 of Public Utility Control, Illinois Commerce Commission, the Indiana Utility Regulatory
21 Commission, the Iowa Utilities Board, the Kentucky Public Service Commission, the
22 Michigan Public Service Commission, the Missouri Public Service Commission, the
23 Public Utility Commission of Texas, the Wisconsin Public Service Commission and
24 various committees of the Missouri State Legislature. I have also participated on
25 behalf of clients in the Southwest Power Pool Congestion Management System

1 Working Group, the Alliance Market Development Advisory Group and several
2 working groups of the Midwest Independent Transmission System Operator, Inc.
3 ("MISO"), including the Congestion Management Working Group. I am currently an
4 alternate member of the MISO Advisory Committee in the end-use customer sector
5 on behalf of a group of industrial end-use customers in Illinois. I am also the past
6 Chairman of the Issues/Solutions Subgroup of the MISO Revenue Sufficiency
7 Guarantee ("RSG") Task Force. In 2009, I completed the University of
8 Wisconsin-Madison High Voltage Direct Current ("HVDC") Transmission course for
9 Planners that was sponsored by MISO. I am a member of the Power Engineering
10 Society of the Institute of Electrical and Electronics Engineers ("IEEE").

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

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**Schedules JRD-1 through JRD-11
are
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