

Exhibit No.:  
Witness: James R. Dauphinais  
Type of Exhibit: Direct Testimony  
Issue: Off-System Sales Revenue and Margin  
Sponsoring Parties: Missouri Industrial Energy Consumers  
Case No.: ER-2008-0318

**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 ) Case No. ER-2008-0318  
Rates for Electric Service Provided to Customers )  
in the Company's Missouri Service Area. )  
\_\_\_\_\_)

Direct Testimony and Schedule of

**James R. Dauphinais**

On Behalf of

**Missouri Industrial Energy Consumers**

August 28, 2008

  
BRUBAKER & ASSOCIATES, INC.  
ST. LOUIS, MO 63141-2000

Project 8983

**NON-  
PROPRIETARY  
VERSION**

**BEFORE THE PUBLIC SERVICE COMMISSION  
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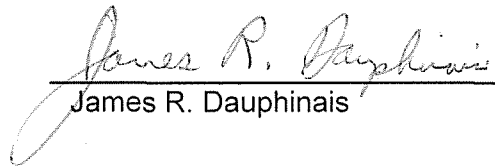
Case No. ER-2008-0318

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

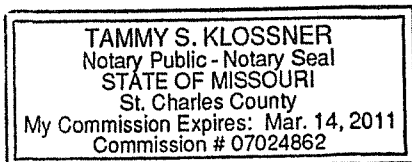
**Affidavit of James R. Dauphinais**

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 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141. 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 are my direct testimony and schedule, which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2008-0318.
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.

  
\_\_\_\_\_  
James R. Dauphinais

Subscribed and sworn to before me this 27<sup>th</sup> day of August 2008.



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

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

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**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.**

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**Case No. ER-2008-0318**

**Direct Testimony of James R. Dauphinais**

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

2    A     My name is James R. Dauphinais and my business address is 1215 Fern Ridge  
3         Parkway, Suite 208, St. Louis, MO 63141.

4    **Q     WHAT IS 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     These are set forth 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

1 AmerenUE, principally under the Large Primary Service (LPS) Rate Schedule,  
2 Rate 11.

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

4 A My testimony addresses AmerenUE's off-system sales. Specifically, I address the  
5 unreasonableness of AmerenUE's proposed level of off-system sales earnings.

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

8 **Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS.**

9 A I recommend that the Missouri Public Service Commission (Commission) reduce  
10 AmerenUE's proposed revenue requirement (and the base point of AmerenUE's  
11 proposed Fuel Adjustment Clause (FAC)) by not less than \$64.5 million to correct  
12 AmerenUE's unreasonably low estimate of off-system sales earnings. In addition,  
13 because evidence shows AmerenUE's net earnings from off-system sales could be  
14 as much as \$89.2 million higher than AmerenUE proposed, any FAC for AmerenUE  
15 (if one is approved in this proceeding), should flow off-system sales revenues through  
16 to ratepayers as AmerenUE has proposed so that higher off-system sales earnings  
17 due to higher market prices flow through to customers.

18 **Q HAVE YOU REVIEWED HOW AMERENUE DEVELOPED ITS FUEL AND  
19 PURCHASED POWER COSTS AND OFF-SYSTEM SALES REVENUES?**

20 A Yes. AmerenUE performed PROSYM production cost simulations to develop fuel  
21 cost, purchased power cost and off-system sales revenues for its proposed test year.  
22 Known forward energy sales for 2008 were incorporated in the modeling. For

**James R. Dauphinais  
Page 2**

1 dispatch purposes, these simulations used spot prices for fuel and wholesale  
2 electricity that AmerenUE developed by averaging historical spot prices for 2006 and  
3 2007 (Finnell Direct Testimony at 10-11 and Schukar Direct Testimony at 10-13).  
4 After performing the dispatch, AmerenUE made an accounting adjustment to the  
5 results to reflect its known contract cost for coal and nuclear fuel based on executed  
6 contract prices for these fuels that were in effect on January 1, 2008 (Finnell Direct  
7 Testimony at 10). Finally, AmerenUE added \$11.3 million in off-system capacity  
8 sales revenues and \$3.5 million in ancillary service revenues to the off-system energy  
9 sales results from the production cost simulations to reflect known and measurable  
10 capacity sales in 2008 and estimated lost capacity sales revenues from the Taum  
11 Sauk pumped storage facility (Schukar Supplemental Direct Testimony at 2-3).

12 **Q WHAT REASON DID AMERENUE GIVE FOR USING THE AVERAGE OF SPOT**  
13 **PRICES FOR FUEL AND WHOLESALE ELECTRICITY FOR 2006 AND 2007**  
14 **RATHER THAN ACTUAL SPOT PRICES FOR THE TEST YEAR ADJUSTED FOR**  
15 **KNOWN AND MEASURABLE CHANGES THROUGH JUNE 30, 2008?**

16 A AmerenUE argued it was appropriate and necessary to normalize the hourly spot  
17 market prices used in the production cost modeling to ensure they were consistent  
18 with the normalization of other inputs such as load and generation (Schukar Direct  
19 Testimony at 11).

20 **Q DO YOU AGREE WITH HOW AMERENUE NORMALIZED SPOT MARKET PRICES**  
21 **BY SIMPLY AVERAGING 2006 AND 2007 SPOT MARKET PRICES?**

22 A No. AmerenUE's approach significantly understates the market prices it is  
23 experiencing for spot sales of electricity at wholesale. Because AmerenUE is a

James R. Dauphinais  
Page 3

1 significant net seller of electricity into the Midwest Independent Transmission System  
2 Operator, Inc. ("MISO") spot energy market and AmerenUE's fuel costs are  
3 substantially immune to spot price variations, the understatement of spot market  
4 prices in AmerenUE's normalization approach causes AmerenUE's production cost  
5 modeling to unreasonably understate the off-system energy sales earnings  
6 component of AmerenUE's revenue requirement. While a normalization of hourly  
7 spot prices may be appropriate, AmerenUE's specific approach is not.

8 **Q CAN YOU PLEASE EXPLAIN WHY AMERENUE'S APPROACH TO**  
9 **NORMALIZING HOURLY SPOT MARKET PRICES IS UNREASONABLE?**

10 A Yes. AmerenUE's normalization approach fails to address the known and  
11 measurable upward trend in the annual average of spot market prices. Table 1  
12 presents a comparison of the weighted average hourly day-ahead electricity market  
13 prices at AmerenUE generation nodes during the 12 calendar months of 2006  
14 (\$38.97), the 12 calendar months of 2007 (\$41.99) and the 12 months ending June  
15 30, 2008 (\$44.73).<sup>1</sup> It also shows AmerenUE's proposed average of 2006 and 2007  
16 prices (\$40.47). There is a clear, known and measurable upward price trend in the  
17 12-month averages of historic spot market prices for electricity.

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<sup>1</sup>In constructing these averages from historical MISO Locational Marginal Pricing (LMP) data for AmerenUE's generation nodes, I used the same weightings used by AmerenUE as discussed in Mr. Schukar's Direct Testimony at page 11.

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**TABLE 1**

**Comparison of 2006, 2007 and July 2007 through June 2008**  
**Average Hourly Wholesale Electricity Market Prices (per MWh)**

	<u>Calendar Year</u> <u>2006</u>	<u>Average of</u> <u>2006 and 2007*</u>	<u>Calendar Year</u> <u>2007</u>	<u>July 2007</u> <u>through June 2008</u>
12-month average	\$38.97	\$40.47	\$41.99	\$44.73

\*Used by AmerenUE in its rate case PROSYM runs.

1            In addition, forward electricity prices, which are an indication of the market's  
2 view of future spot prices, show that the market expects higher spot prices than those  
3 experienced on average in earlier years, such as 2006. Table 2 compares historical  
4 day-ahead on-peak market prices for electricity at AmerenUE's generation nodes to  
5 industry reported Cinergy Hub forward prices for electricity for the prompt 12 months,<sup>2</sup>  
6 basis adjusted to AmerenUE's generation nodes.<sup>3</sup>

7            As can be seen, even the average of historical on-peak day-ahead spot prices  
8 for the 12 months ended June 30, 2008 (\$58.96) is lower than the lowest on-peak  
9 forward price reported over the past six months (\$59.61) and significantly lower than  
10 the on-peak forward market average (\$70.03) and the on-peak forward market high  
11 (\$79.56) over the past six months.

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<sup>2</sup>By "prompt 12 months," I mean the forward price reported for the next 12 calendar months. For example, the prompt 12-month forward price reported for August 19, 2008 would be for September 2008 through August 2009.

<sup>3</sup>The basis adjustment was performed by multiplying the industry-reported Cinergy Hub forward price by the ratio of the average of July 2007 - June 2008 day-ahead on-peak Locational Marginal Prices (LMP) for AmerenUE's generation nodes to the average of July 2007 - June 2008 day-ahead on-peak LMPs for Cinergy Hub.

**TABLE 2**

**Comparison of Historical On-Peak Spot Prices to  
On-Peak Forward Prices (per MWh)**

Historical Calendar Year 2006 Day-Ahead Spot	\$50.47
Average of Historical 2006 and 2007 Day-Ahead Spot	\$52.81
Historical Calendar Year 2007 Day-Ahead Spot	\$55.15
Historical July 2007 - June 2008 Day-Ahead Spot	\$58.96
March 19 - August 19, 2008 Low Prompt 12-month Forward	\$59.61
March 19 - August 19, 2008 Average Prompt 12-month Forward	\$70.03
March 19 - August 19, 2008 High Prompt 12-month Forward	\$79.56

1   **Q     WHEN COMPARING FORWARD PRICES TO SPOT PRICES, IS THERE ANY**  
2           **NEED TO REMOVE A RISK PREMIUM OR DISCOUNT FROM THE FORWARD**  
3           **PRICES?**

4   **A**    No. Forward prices effectively reflect the market consensus regarding probable  
5           outcomes of future spot prices. If a subsequently realized spot price is below a  
6           corresponding forward price, it does not necessarily follow that the forward price  
7           contained a premium, but rather that some possible outcome (e.g., a price spike due  
8           to an extreme weather event) was unrealized.

9                    To carve out a “premium” from the forward price would in essence assign a  
10                   probability of zero to higher spot price outcomes. Such an assumption would  
11                   understate expected spot prices since there is always some probability that price  
12                   spikes could occur and such an occurrence would provide an opportunity for  
13                   AmerenUE to earn a higher off-system sales margin. Therefore, no risk premium  
14                   needs to be removed from the forward price or any risk discount added back into the  
15                   price.



1 Q WHAT DO YOU RECOMMEND INSTEAD OF AMERENUE'S APPROACH OF  
2 NORMALIZING SPOT MARKET PRICES BY AVERAGING HISTORICAL 2006 AND  
3 2007 SPOT MARKET PRICES?

4 A I recommend that AmerenUE's proposed revenue requirement (and the base point of  
5 AmerenUE's proposed FAC) be reduced by not less than \$64.5 million to correct  
6 AmerenUE's unreasonably low estimate of off-system sales earnings which resulted  
7 from using unreasonably low spot market price assumptions in the PROSYM  
8 production cost simulations it performed for this rate proceeding. In addition, I  
9 recommend, due to the uncertainty associated with the level of AmerenUE's  
10 off-system sales earnings, that if an FAC for AmerenUE is approved in this  
11 proceeding the FAC flow off-system sales revenues through to ratepayers.

12 Q PLEASE EXPLAIN THE BASIS FOR THE \$64.5 MILLION ADJUSTMENT.

13 A Highly Confidential Table 3 contains a comparison of AmerenUE's off-system sales  
14 for recent historic periods and as projected with PROSYM for this rate case and for  
15 AmerenUE's internal fuel budget. All values are without Taum Sauk in service. The  
16 table shows that AmerenUE's margin from off-system sales could be as much as  
17 \$89.2 million above AmerenUE's rate case PROSYM prediction. These numbers  
18 show two things. First, AmerenUE's rate case prediction of off-system sales  
19 revenues is significantly understating the expected value of AmerenUE's off-system  
20 sales revenues. Second, there is substantial uncertainty associated with  
21 AmerenUE's off-system sales revenues and margin.

HIGHLY CONFIDENTIAL TABLE 3 (Non-Proprietary Version)

Comparison of 12 Months of AmerenUE Off-System Sales (without Taum Sauk)

\*\*\* ALL NUMERIC VALUES IN TABLE ARE HIGHLY CONFIDENTIAL \*\*\*

Line	Case	Revenue (Millions)	Fuel and Purchased Power Cost (Millions)	Margin (Millions)	Margin Increase Over Rate Case PROSYM Projection (Millions)
1	Rate Case PROSYM Projection (Supplemental Direct Testimony runs w/o Taum Sauk)	****(1)	*****	*****	*****
2	Actual Calendar Year 2007 (Response to MIEC 4-2)	****	*****	*****	*****
3	Actual July 2007 through June 2008 (Response to MIEC 4-2)	****	*****	*****	*****
4	<b>Fuel Budget Forecast 2008 PROSYM Projection of 1/10/2008 (Response to OPC 2071)</b>	****(1)	*****	*****	*****
5	Actual January 2008 - June 2008 plus Fuel Budget Forecasted July 2008 - December 2008 as of 7/21/2008	****(2)	*****	*****	*****

(1)\*\*\*\*  
(2)\*\*\*\*

1 My recommended \$64.5 million adjustment is based on the off-system sales margin  
 2 difference between \*\*\*  
 3 \*\*\* and AmerenUE's rate case production cost simulations  
 4 without Taum Sauk.

5 In my opinion, the \*\*\*  
 6 \*\*\* is the most reasonable number to use for several reasons. First, it is the  
 7 number AmerenUE uses for its own \*\*\* \*\*\* which is an indication  
 8 that it represents AmerenUE's own expectation of its off-system sales. Second, it is  
 9 conservatively low \*\*\*

10 \*\*\*  
 11 (Highly Confidential Schedule JRD-1, lines 3 and 4). Finally, it is also \*\*\*  
 12 \*\*\* lower than \*\*\*

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My recommendation to pass off-system sales revenues through any approved FAC to ratepayers is designed to address the possibility discussed above that AmerenUE’s actual off-system sales margin could be as much as \$89.2 million greater than that projected from its rate case PROSYM runs.

**Q IS THERE ANY OTHER WAY THE COMMISSION COULD ADDRESS AMERENUE’S UNDERSTATEMENT OF OFF-SYSTEM SALES EARNINGS?**

A Yes. The Commission could require AmerenUE to rerun its rate case PROSYM production cost simulations with AmerenUE’s normalized hourly spot prices for wholesale electricity scaled up to the average of historical day-ahead MISO spot price market prices at the AmerenUE generation nodes for the 12 months ended June 30, 2008. The adjustment would be to multiply each of AmerenUE’s hourly prices by 110.5% ( $\$44.73 \div \$40.47$ ). A similar adjustment would be made to spot fuel prices used in the model based on the average of spot fuel prices for the 12 months ended June 30, 2008, but the accounting adjustment for contracted prices for AmerenUE’s coal and nuclear fuel would be maintained.

This alternative approach would preserve AmerenUE’s hourly normalized prices while ensuring those prices as a whole reflect the known and measurable higher average level of current spot market prices consistent with those adjustments AmerenUE has made for forward energy sales and contracted coal and nuclear fuel supplies. However, the current procedural schedule does not allow time for such reruns in a manner that would provide intervenors with a reasonable opportunity to review, conduct discovery and provide testimony on such reruns. In addition, as I

1           have discussed, there is already sufficient evidence that shows my recommend \$64.5  
2           million adjustment to AmerenUE's revenue requirement is based on a reasonable and  
3           conservative estimate of AmerenUE's off-system sales earnings. The conservatism  
4           in the adjustment eliminates the need to attempt to estimate a normalized level of  
5           off-system sales earnings. Therefore, the Commission can adopt my adjustment  
6           without having a rerun of AmerenUE's rate case PROSYM simulations.

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

8    **A       Yes, it does.**

## Appendix A

### Qualifications of James R. Dauphinais

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

2    A     James R. Dauphinais. My business address is 1215 Fern Ridge Parkway, Suite 208,  
3     St. Louis, Missouri 63141.

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.

1           In the employment of the Northeast Utilities Service Company, I was  
2 responsible for conducting thermal, voltage and stability analyses of the Northeast  
3 Utilities' transmission system to support planning and operating decisions. This  
4 involved the use of load flow and power system stability computer simulations.  
5 Among the most notable achievements I had in this area include the solution of a  
6 transient stability problem near Millstone Nuclear Power Station, and the solution of a  
7 small signal (or dynamic) stability problem near Seabrook Nuclear Power Station. In  
8 1993 I was awarded the Chairman's Award, Northeast Utilities' highest employee  
9 award, for my work involving stability analysis in the vicinity of Millstone Nuclear  
10 Power Station.

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

20           In addition to my technical responsibilities, I was also responsible for oversight  
21 of the day-to-day administration of Northeast Utilities' Open Access Transmission  
22 Tariff. This included the creation of Northeast Utilities' pre-FERC Order No. 889  
23 transmission electronic bulletin board and the coordination of Northeast Utilities'  
24 transmission tariff filings prior to and after the issuance of Federal Energy Regulatory  
25 Commission (FERC or Commission) FERC Order No. 888. I was also responsible for

1 spearheading the implementation of Northeast Utilities' Open Access Same-Time  
2 Information System and Northeast Utilities' Standard of Conduct under FERC Order  
3 No. 889. During this time I represented Northeast Utilities on the Federal Energy  
4 Regulatory Commission's "What" Working Group on Real-Time Information Networks.  
5 Later I served as Vice Chairman of the NEPOOL OASIS Working Group and Co-  
6 Chair of the Joint Transmission Services Information Network Functional Process  
7 Committee. I also served for a brief time on the Electric Power Research Institute  
8 facilitated "How" Working Group on OASIS and the North American Electric Reliability  
9 Council facilitated Commercial Practices Working Group.

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

1 Public Utility Commission of Texas, the Wisconsin Public Service Commission and  
2 various committees of the Missouri State Legislature. I have also participated on  
3 behalf of clients in the Southwest Power Pool Congestion Management System  
4 Working Group, the Alliance Market Development Advisory Group and several  
5 working groups of the Midwest Independent Transmission System Operator, Inc.  
6 (MISO), including the Congestion Management Working Group. I am currently an  
7 alternate member of the MISO Advisory Committee in the end-use customer sector  
8 on behalf of a group of industrial end-use customers in Illinois. I am also the past  
9 Chairman of the Issues/Solutions Subgroup of the MISO Revenue Sufficiency  
10 Guarantee (RSG) Task Force. In addition to our main office in St. Louis, the firm also  
11 has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

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**AmerenUE**  
**MPSC Case No. ER-2008-0318**

**Comparison of January through June Off-System Sales without Taum Sauk**

<u>Line</u>	<u>Case</u>	<u>Six-Month Volume (GWh)</u>	<u>Six-Month Revenue (Millions)</u>	<u>Six-Month Fuel and Purchased Power Cost (Millions)</u>	<u>Six-Month Margin (Millions)</u>
1	Actual 2007 (HC Response to MIEC 4-2)	*****	*****	*****	*****
2	AmerenUE Rate Case PROSYM Projection (Supplemental Direct Testimony runs w/o Taum Sauk)	*****	*****	*****	*****
3	AmerenUE 2008 Fuel Budget PROSYM Projection (HC Response to OPC 2071)	*****	*****	*****	*****
4	Actual 2008 (HC Response to MIEC 4-2)	*****	*****	*****	*****

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(1)\*\*\*\*