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.			
AFFIDAVIT OF JOHN P. CASSIDY			
STATE OF MISSOURI)) ss. COUNTY OF COLE)			
John P. Cassidy, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.			
John P. Cassidy			
Subscribed and sworn to before me this 200 day of Abriller 2007.			
TONI M. CHARLTON Notary Public . TONI M. CHARLTON Notary Public . State of Missouri My Commission Expires December 28, 2008 Cole County Commission #04474301			

1	REBUTTAL TESTIMONY
2	\mathbf{OF}
3	JOHN P. CASSIDY
4	UNION ELECTRIC COMPANY d/b/a
5	AMERENUE
6	CASE NO. ER-2007-0002
7	EXECUTIVE SUMMARY
8	AMERENUE GENERATION MIX 2
9	ESTIMATED INCREASES IN COAL COST
10	ESTIMATED INCREASE IN NUCLEAR FUEL
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1		REBUTTAL TESTIMONY
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3		JOHN P. CASSIDY
4		UNION ELECTRIC COMPANY
5		d/b/a AMERENUE
6		CASE NO. ER-2007-0002
7	Q.	Please state your name and business address.
8	Α.	John P. Cassidy, 9900 Page Avenue, Suite 103, Overland, Missouri 63132.
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by the Missouri Public Service Commission (Commission) as a
11	Regulatory A	auditor.
12	Q.	Are you the same John P. Cassidy who filed direct testimony in this case on
13	December 15	, 2006?
14	Α.	Yes.
15	<u>EXECUTIV</u>	E SUMMARY
16	Q.	Please give a brief summary of your Rebuttal Testimony.
17	A.	My Rebuttal Testimony will provide an estimate of future total increases in
18	coal commo	dity and transportation costs that Union Electric Company d/b/a AmerenUE
19	(AmerenUE	or Company) is expected to incur during 2008 and 2009. This testimony will
20	also provide	an estimate of the future increases in nuclear fuel cost that AmerenUE is
21	expected to	incur through 2009. These calculations have been referred to by Staff witness
22	Warren Woo	d in his Rebuttal Testimony filed as part of this rate proceeding.

AMERENUE GENERATION MIX

- Q. What was AmerenUE's overall generation mix for the 12 months ending June 30, 2006 as well as for the twelve months ending December 31, 2006?
- A. The following table summarizes AmerenUE's actual net generation (gross generation less station use) by groupings of primary fuel source for the test year ending June 30, 2006, as well as for the 12 months ending December 31, 2006:

	Net MWH		Net MWH	
Primary	Generation	6/30/06	Generation	12/31/06
Fuel Source	<u>6/30/2006</u>	% of Total	<u>12/31/2006</u>	% of Total
Nuclear	8,079,309	16.5%	10,116,660	19.9%
Coal	39,458,584	80.6%	39,375,535	77.4%
CTG Gas/Oil	451,481	0.9%	409,889	0.8%
Hydro/Pump	958,832	<u>2.0%</u>	<u>955,563</u>	<u>1.9%</u>
Total	48,948,206	100%	50,857,647	100%

AmerenUE also purchases power to meet native load and to make interchange sales. The following table summarizes AmerenUE's actual net generation including the amount of purchased power for both the test year June 30, 2006 and the twelve months ending December 31, 2006:

	Purchases & Net MWH		Purchases & Net MWH	
Primary	Generation	6/30/06	Generation	12/31/06
Fuel Source	<u>6/30/2006</u>	% of Total	<u>12/31/2006</u>	% of Total
Nuclear	8,079,309	15.1%	10,116,660	19.1%
Coal	39,458,584	73.5%	39,375,535	74.1%
CTG Gas/Oil	451,481	0.8%	409.889	0.8%
Hydro/Pump	958,832	1.8%	955,563	1.8%
Purchased Power	4,706.599	8.8%	2,252,920	4.2%
Total	53,654,805	100%	53,110,567	100%

Both of these charts demonstrate that the majority of AmerenUE's actual net generation is provided through its use of nuclear and coal fired plants.

- Q. What was the generation mix that the Staff determined for AmerenUE as part of its direct testimony filing on December 15, 2006?
- A. Through the use of its production cost model the Staff calculated the following generation mix:

	Purchases & Net MWH	
Primary	Generation	
Fuel Source	Staff Model	% of Total
Nuclear	9,322,491	17.2%
Coal	38,407,371	71.0%
CTG Gas/Oil	295,669	0.5%
Hydro/Pump	1,237,388	2.3%
Purchased Power	4.888,270	9.0%
Total	54,151,189	100%

The Staff's production cost model included Electric Energy, Inc. (EEInc.) supplied power based upon AmerenUE's 40% ownership interest as well as Taum Sauk as being fully available to AmerenUE excluding the effect of the reservoir breach.

ESTIMATED INCREASES IN COAL COST

- Q. Does AmerenUE expect that its cost of coal will continue to increase beyond 2007?
- A. Yes. Based on contracts currently in place, AmerenUE will pay more for its coal supply in 2008 than it did in 2007. Likewise, similar increases are expected to occur again in 2009.
- Q. Please quantify what level of increases AmerenUE faces with regard to its sources of coal supply.
- A. In its response to Staff Data Request No. 505, the Company provided a calculation of the expected level of increased coal and related freight costs that it will incur

1	over the next two years. Based on the calculations that were provided in that data request
2	response, the Company estimates that it will incur an increase in coal commodity and
3	transportation costs of approximately ** ** during 2008 above what it will
4	incur during 2007. Additionally the Company estimates that during 2009 it will incur an
5	increase related to coal cost of approximately ** ** above what it will incur
6	during 2008.
7	Q. Is the timing of the commodity coal and transportation increases that is
8	quantified above, known at this time?
9	A. Yes. These coal and related transportation increases are contractually
10	scheduled to begin on ****.
11	ESTIMATED INCREASE IN NUCLEAR FUEL
12	Q. Are any increases in AmerenUE's nuclear fuel costs expected in the future?
13	A. Yes. In the response to Staff Data Request No. 501, the Company stated that
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18	**.
19	During a meeting on January 26, 2007, the Company provided the Staff with actual
20	calendar year ending 2006 nuclear fuel costs as well as its budgeted nuclear fuel costs for
21	2007, 2008 and 2009. The following chart summarizes the Company's forecast of nuclear

1	fuel costs (excluding spent fuel, decommissioning and dismantling and Westinghouse Credits)
2	through the end of 2009:
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9	Q. Does the Company expect any additional increases in nuclear fuel costs
10	subsequent to the May 2007 increase?
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16	NATURAL GAS AND FUEL OIL
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15 16 17 18	NATURAL GAS AND FUEL OIL Q. What impact will natural gas and fuel oil costs have on the Company's future
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116 117 118 119	NATURAL GAS AND FUEL OIL Q. What impact will natural gas and fuel oil costs have on the Company's future expense levels? A. The Staff has not attempted to quantify the impact of any future expected increases or decreases in natural gas and fuel oil costs related to the AmerenUE's operations.
116 117 118 119 220	NATURAL GAS AND FUEL OIL Q. What impact will natural gas and fuel oil costs have on the Company's future expense levels? A. The Staff has not attempted to quantify the impact of any future expected increases or decreases in natural gas and fuel oil costs related to the AmerenUE's operations. The Staff would note that during the test year AmerenUE's use of natural gas and oil fired
116 117 118 119 220 221	NATURAL GAS AND FUEL OIL Q. What impact will natural gas and fuel oil costs have on the Company's future expense levels? A. The Staff has not attempted to quantify the impact of any future expected increases or decreases in natural gas and fuel oil costs related to the AmerenUE's operations. The Staff would note that during the test year AmerenUE's use of natural gas and oil fired facilities accounted for less than 1% of its total generation mix. Any change in natural gas

1	Q. What coal, coal treight and nuclear fuel prices will be included as part of the
2	rate case true-up procedure for this rate case?
3	A. The Staff intends to include all contract coal and related transportation prices
4	in effect as of the cut-off date, January 1, 2007, agreed to by the parties to this case. The Staff
5	also plans to include the updated nuclear fuel costs as reported in response to Staff Data
6	Request No. 60 through the end of December 31, 2006. Through this true-up process, all
7	known and measurable increases in coal and freight costs as well as nuclear fuel price
8	increases, which will be reflected in expense by AmerenUE at January 1, 2007 will be fully
9	included in Staff's cost of service calculation.
10	Q. Based on the Staff's level of total annualized fuel and purchase power expense,
11	what percentage of increase do the estimated coal and nuclear fuel expenses represent?
12	A. **
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	SUMMARY
	Q. Please summarize your Rebuttal Testimony.
	A. For 2008 and 2009 the estimated coal and nuclear fuel expense increases are
	approximately ** ** and ** ** respectively. Again, the Staff would note that
	during the test year AmerenUE's use of natural gas and oil fired facilities accounted for less
	than 1% of its total generation mix.
	Q. Is the frequency of the increases in coal and nuclear fuel expense similar to
	increases associated with other significant expense items included in the cost of service?
	A. Yes. Much like annual wage increases that occur on known specific dates in
	the future, AmerenUE will incur annual increases in its fuel expense for coal and related
	freight cost at known specific dates in the future. Nuclear fuel expense increases occur over a
	longer interval, once every eighteen months, when AmerenUE performs a refueling of its
	Callaway plant.
	Q. Does this conclude your Rebuttal Testimony?
	A. Yes.
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