

Exhibit No.:
Issues: SO₂ Emission Allowances
Witness: James C. Moore II
Sponsoring Party: Union Electric Company
Type of Exhibit: Surrebuttal Testimony
Case No.: ER-2007-0002
Date Testimony Prepared: February 27, 2007

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

SURREBUTTAL TESTIMONY

OF

JAMES C. MOORE II

ON

BEHALF OF

**UNION ELECTRIC COMPANY
d/b/a AmerenUE**

**St. Louis, Missouri
February, 2007**

1 **Q. Mr. Kind recommends that the Commission use \$25,638,379 as the**
2 **normalized level of SO2 allowance sales in this case. Should the Commission establish a**
3 **normalized level of SO2 allowance sales in this case?**

4 A. No, as explained in my Rebuttal Testimony and in Mr. Warner Baxter's
5 Rebuttal Testimony, we do not believe that establishing a normalized level of allowance sales
6 is in the best interest of the Company or its customers. Inclusion of a normalized level of
7 allowance revenues in rates presumes that AmerenUE will continue to sell SO2 allowances
8 in that amount every year. Selling \$25 million worth of allowances at current market prices
9 equals roughly 50,000 allowances per year. This would rapidly erode the current allowance
10 surplus held by AmerenUE and lead to a shortfall in 2012. A shortfall in 2012 would require
11 AmerenUE to accelerate scrubber installation schedules at substantial capital cost as
12 explained in Mr. Baxter's Rebuttal Testimony. Mr. Kind recognized in his Rebuttal
13 Testimony that the allowance market can be extremely volatile. Setting rates based on \$25
14 million of normalized sales could require AmerenUE to sell substantially more allowances
15 per year if prices drop or much fewer allowances if prices increase. The market is not
16 predictable and requiring a fixed dollar amount of sales will not allow AmerenUE to properly
17 manage its allowance bank.

18 **Q. Would establishment of a normalized level of emission allowances sales**
19 **have an effect on AmerenUE's participation in the SO2 emission allowance market?**

20 A. Yes, market participants will know AmerenUE's position and will take
21 advantage of the fact that they know AmerenUE is expected to sell \$25 million in allowances
22 every year. Thus, it will likely depress the prices AmerenUE could otherwise realize
23 requiring that AmerenUE sell even more allowances.

24 **Q. Should a lower level of normalized sales be imputed in this case?**

1 A. No, any normalized level of sales will artificially constrain AmerenUE's
2 ability to balance emission reduction requirements with its allowance position and emission
3 reduction equipment installations. AmerenUE believes that the more prudent course is to set
4 up a regulatory liability account for all SO₂ emission sales made after rates set in this case
5 take effect to help finance the costs of future environmental compliance, similar to the
6 mechanism proposed by Staff. Mr. Baxter discusses this in more detail in his Rebuttal
7 Testimony. This regulatory mechanism will allow AmerenUE the flexibility to manage its
8 SO₂ allowance position as circumstances change over time, and will remove the potentially
9 contentious issue of what the appropriate level of allowance revenues to include in rates
10 should be. The allowance market will continue to fluctuate substantially over the next few
11 years as utilities nationwide work on scrubber installations. The price of steel and manpower
12 has already risen dramatically due to worldwide demand. This is impacting scrubber
13 economics and thus, SO₂ emission allowance prices. AmerenUE currently has a very strong
14 emission allowance position due to its active participation in the market over the past 10
15 years. This position has allowed AmerenUE to enter the scrubber market in a careful and
16 deliberate way, learning from other utilities' experience.

17 **Q. Are Mr. Kind's revenue adjustments to 2005 and 2006 SO₂ emission**
18 **allowance sales accurate?**

19 A. No. For 2006, Mr. Kind identifies¹ an additional \$7,340,850 associated with
20 trade ticket FUS-158-X that he claims was not accounted for. This trade ticket, as explained
21 in AmerenUE's response to Office of the Public Counsel (OPC) Data Request 2225 (attached
22 to this testimony as Schedule JCM- 1), was required by Ameren's risk management software
23 to close out a physically delivered futures position. Trade ticket FUS-158-X does not reflect

¹ Kind Rebuttal Testimony, Jan. 31, 2007, p. 9, l. 5-12.

1 an additional SO2 allowance sale. Rather, it simply documents the delivery of allowances
2 associated with trade tickets FUS-147, 148, 150, 151, and 152-X. Sales FUS-147, 148, 150,
3 151, and 152-X were already included in the revenue for 2006. By adding \$7,340,850,
4 Mr. Kind is double counting these sales and overstating actual 2005 allowance revenues by
5 this amount.

6 **Q. Is this the only instance where Mr. Kind erred in calculating SO2**
7 **emission allowance revenues?**

8 A. No. Mr. Kind also improperly increased the revenues associated with the
9 exercise by Dynegy of two options. The actual amount received by AmerenUE from these
10 two options was \$1,898,956; Mr. Kind artificially raised that number to \$21,383,875.

11 **Q. What is the impact of these two errors?**

12 A. Mr. Kind has overstated 2005 and 2006 allowance revenues by \$26,825,769.
13 This in turn overstates his calculated five-year average by more than \$5 million (\$5,365,174).
14 In the end, his errors should not matter because, as I discussed earlier, the right answer from
15 the standpoint of sound regulatory policy and environmental compliance is to hold allowance
16 proceeds in a regulatory liability account that will be used to help fund necessary emission
17 related capital expenditures at AmerenUE's fossil plants in the future.

18 **Q. Mr. Kind's first error appears to be based upon a simple**
19 **misunderstanding of how Ameren's risk management system uses trade tickets. What**
20 **is the basis for the second error involving the exercise by Dynegy of the two options?**

21 A. Apparently Mr. Kind adjusted the revenues AmerenUE received from the sale
22 of these allowances because he believes that AmerenUE sold the allowances for an average
23 price of \$175 when the market price was actually \$1,475.

1 **Q. Did AmerenUE actually sell these allowances at an extreme discount to**
2 **the market?**

3 A. No. In 2001, AmerenUE sold options to purchase SO₂ emission allowances
4 in the future at fixed prices to Dynegy. At the time the options were sold, the market price
5 for 2006 allowances was just \$124.74 per ton and the market for 2007 allowances was just
6 \$104.19 per ton. The options gave Dynegy the right to exercise the options (some by 2006,
7 some by 2007) at a strike price of either \$180 or \$170 per ton. Consequently, AmerenUE
8 received an option premium (\$55.26 per ton for the 2006 allowances; \$65.81 per ton for the
9 2007 allowances) at a fair market price for option premiums as of the time the options were
10 sold in 2001. Once the options were sold in 2001, AmerenUE had a legal obligation to sell
11 the allowances at the strike prices (averaging \$175/ton) in accordance with the option
12 contracts agreed upon in 2001. AmerenUE could not have sold the allowances for a price
13 higher than the strike price agreed to at the time the options were sold in 2001. AmerenUE
14 was a regular participant in option transactions during 2000 and 2001, but closed out most of
15 the positions by 2004.

16 **Q. Please comment on the allowance market before and after the 2001**
17 **option sales.**

18 A. As the graph appearing at page 15 of Mr. Kind's January 31, 2007 Rebuttal
19 Testimony shows, for several years prior to 2001 and after 2001, allowance prices were very
20 flat. The option premium received in 2001 for the Dynegy options was a fair market price at
21 the time. The fact that prices went up dramatically in 2005 is irrelevant to the decision
22 AmerenUE made in 2001 to sell options at a substantial option premium. Prices started
23 climbing in 2004 as the Clean Air Interstate Rule was promulgated by EPA. Prices

1 continued to climb through the summer of 2005 and dramatically climbed in the fall and
2 early winter of 2005 when two investment banks bought substantial numbers of allowances.

3 **Q. Mr. Kind identifies a transaction approval document relating to the**
4 **exercise by Dynegy of these options that contains the statement that “this transaction is**
5 **also contingent upon considerations in a reactive power case Andy Serri is involved in.”**
6 **Did you include this statement in the approval document?**

7 A. Yes I did. I prepared the transaction document to reflect management’s
8 approval to pay Dynegy \$634,919 to exercise these options early, as discussed further in Mr.
9 Moehn’s Surrebuttal Testimony.

10 **Q. Was this statement true?**

11 A. At the time I thought it was, but have since discovered that I was wrong. Mr.
12 Serri was not involved in a reactive power case. As Mr. Moehn explains in his Surrebuttal
13 Testimony, Mr. Serri only served to establish contact with the proper personnel at Dynegy to
14 discuss exercising the options. As Mr. Moehn’s Surrebuttal Testimony also indicates,
15 apparently Dynegy interjected two transmission cases involving Illinois Power into the
16 discussion of the Dynegy allowance options. I do not recall the details, but I must have heard
17 Mr. Serri’s name discussed in connection with Mr. Moehn’s contacts with Dynegy about the
18 options and must have confused some other reactive power case with the transmission cases
19 that Dynegy actually brought up. This led to the erroneous reference to Mr. Serri and a
20 reactive power case on the transaction approval document.

21 **Q. Mr. Kind states in his Rebuttal Testimony that the approval document**
22 **was never signed by the six executives listed and identified differences in dates between**
23 **the approval document and the trade ticket. Could you explain these aspects of the**
24 **transaction?**

1 A. Yes. The approval document was signed on December 21, 2005 and the trade
2 was completed and ticketed on December 22, 2005. The signed approval document was
3 submitted to OPC in response to a Data Request. The original document sent to OPC was an
4 electronic version that did not have the signatures on it. The SO2 Sales UE.xls document has
5 a date of December 1, 2005. This was when the exercise of the options was initially
6 discussed at AmerenUE, but final approvals did not come until December 21 after Dynegy
7 agreed to exercise the option. The option was actually exercised on December 22.
8 AmerenUE actually transferred the allowances on December 27.

9 **Q. Mr. Kind mentions in his Rebuttal Testimony that AmerenUE paid**
10 **Dynegy \$634,919 to induce them to exercise the options early. Can you explain why this**
11 **was done?**

12 A. Yes. AmerenUE was actively trading options in the 2000–2002 timeframe. Two long
13 dated option streams were sold: FUS-11-R on November 3, 2000 and FUS-14-R on January
14 11, 2001. These options were sold in a low volatility timeframe and realized a substantial
15 amount of premium during a period when we were actively managing the AmerenUE SO2
16 portfolio using options. By 2004, accounting standards had changed and the mark-to-market
17 accounting for the outstanding option position resulted in substantial earnings volatility. In
18 December 2004 and December 2005 AFS, negotiated the early exercise of three options with
19 Dynegy and Arizona Public Service Company for a total of \$834,919 to reduce the impact
20 the remaining options were having on earnings. Ameren agrees that this amount should not
21 be borne by ratepayers.

22 The following table summarizes the two transactions and the outcome
23 associated with each option.

Surrebuttal Testimony of
James C. Moore II

APS FUS-11-R 11/3/2000

Expiration Date	Vintage	Option Style	Contract Type		Strike Price	# of Allowances	Spot Price	If Struck
1/15/2001	2001	European	Call	Short	\$170.00	10,000	\$154.00	\$1,700,000
1/15/2002	2002	European	Call	Short	\$170.00	10,000	\$153.50	\$1,700,000
1/15/2003	2003	European	Call	Short	\$180.00	10,000	\$153.00	\$1,800,000
1/15/2004	2004	European	Call	Short	\$180.00	10,000	\$145.00	\$1,800,000
1/15/2005	2005	European	Call	Short	\$180.00	10,000	\$135.00	\$1,800,000
1/15/2006	2006	European	Call	Short	\$185.00	10,000	\$125.00	\$1,850,000
1/15/2007	2007	European	Call	Short	\$185.00	10,000	\$105.00	\$1,850,000

1/15/2001 Expired worthless
1/15/2002 Expired worthless
3/26/2002 FUS-18-X Bought back 1/15/03 option
5/14/2002 FUS-26-X Bought back 1/15/04 option
11/26/2002 FUS-38-X Bought back 1/15/05 option
12/23/2004 FUS-123-X Paid \$200K to early exercise 1/15/06 option.
1/12/2007 FUS-159-X APS exercised 1/15/07 option.

Dynegy FUS-14-R 1/11/2001

Expiration Date	Vintage	Option Style	Contract Type		Strike Price	# of Allowances	Spot Price	If Struck
12/2/2002	2002	European	Call	Short	\$175.00	7,250	\$146.75	\$1,268,750
12/1/2003	2003	European	Call	Short	\$180.00	7,250	\$146.05	\$1,305,000
12/1/2004	2004	European	Call	Short	\$185.00	7,250	\$144.18	\$1,341,250
12/1/2005	2005	European	Call	Short	\$190.00	7,250	\$139.41	\$1,377,500
12/1/2006	2006	European	Call	Short	\$180.00	7,250	\$124.74	\$1,305,000
12/3/2007	2007	European	Call	Short	\$170.00	7,250	\$104.19	\$1,232,500

12/2/2002 Expired worthless
12/1/2003 FUS-98-X Dynegy exercised 12/1/03 option.
12/1/2004 FUS-121-X Dynegy exercised 12/1/04 option.
12/1/2005 FUS-142-X Dynegy exercised 12/1/05 option.
12/22/2005 FUS-143-X Paid \$634,919 to early exercise 12/1/06 and 12/3/07 options.

1

2 **Q. Mr. Kind states that “this transaction [the Dynegy option] is part of a**
3 **continuing pattern of UE’s mismanagement of its SO2 allowance bank.” Do you agree**
4 **with this statement?**

5 A. No, I do not. As I noted earlier, AmerenUE did not sell allowances in 2005
6 for a below-market price. Rather, Dynegy exercised an option sold to it in 2001 for an option
7 premium that reflected market values at that time. The facts are that Ameren Energy Fuels
8 and Services, which manages AmerenUE’s allowances, is an industry leader in emissions

1 management. AmerenUE's emission allowance bank has put AmerenUE in a position of
2 strength facing the tightening emission standards over the next decade. AFS has been a key
3 player in the emission allowance trading market. I am currently serving as Treasurer of the
4 Environmental Markets Association, an industry trade group that promotes market based
5 trading solutions for environmental management. We have been active traders on behalf of
6 AmerenUE and pioneered many of the most effective trading strategies used in the industry.
7 AFS has used many different trading strategies over the years—including allowance loans,
8 vintage swaps, sales, and options.

9 From 2000 through 2005, AmerenUE used its allowance management
10 activities to add 225,144 allowances to the AmerenUE position by swapping excess banked
11 allowances into future vintages at extremely attractive swap ratios. These additional
12 allowances held by AmerenUE as a result of the allowance management for which
13 Commission approval was sought and obtained in 1998 are currently valued at \$93 million.
14 This effectively gives AmerenUE an additional \$93 million to use for environmental
15 compliance in lieu of greater or earlier capital investments. These allowances were added to
16 AmerenUE's position with very little risk and have allowed AmerenUE great latitude to deal
17 with the constantly changing environmental compliance requirements imposed on our fossil
18 fired power plants.

19 **Q. Mr. Kind makes allegations of affiliate abuse in his Rebuttal Testimony.**
20 **Has Ameren Energy Fuels and Services used AmerenUE's allowance bank to support**
21 **other affiliates?**

22 **A. No.** There has been one major allowance transaction between Ameren
23 affiliates which, in hindsight, was overwhelmingly in favor of AmerenUE at the expense of
24 Ameren Energy Generating Co. ("AEG"). This transaction occurred when AmerenUE

- 1 entered into a vintage swap with AEG on January 22, 2001 (FUS-16-R). The vintage swap
2 was done at fair market value at the time of the trade, and is summarized in the table below:

AmerenUE/AmerenEGC Swap 01/22/2001

Vintage	SO2 Tons			Market Price	Value	Broker Fee
	Given	Received	Interest			
2000	-40000			\$147.00	-\$5,880,000	
2001	-40000			\$147.00	-\$5,880,000	
2002	-40000			\$146.71	-\$5,868,400	
2006		54280	14280	\$130.00	\$7,056,400	
2007		54280	14280	\$105.00	\$5,699,400	
2008		54280	14280	\$90.00	\$4,885,200	
	-120000	162840			\$12,600	

- 3
4 This transaction generated an additional 42,840 allowances for AmerenUE that are currently
5 worth \$21 million. In hindsight, it is clear that AEG would have been much better off buying
6 allowances at the time and borrowing money to pay for them. Instead, AmerenUE took
7 120,000 allowances that were not required for compliance at the time and turned them into
8 162,840 allowances due to the strong decline in spot prices for future vintages.

9 **Q. Does this conclude your Surrebuttal Testimony?**

10 **A.** Yes, it does.

Ameren's Response to
OPC Data Request
MPSC Case No. ER-2007-0002
AmerenUE's Tariff Filing to Increase Rates for Electric Service
Provided to Customers in the Company's Missouri Service Area

Requested From: Ryan Kind

Data Request No. OPC 2225

Please reference the documentation for the SO2 transaction that appears on Attachment 2 of Ryan Kind's rebuttal testimony. Did this transaction actually take place in late December of 2006 as the documentation in Attachment 2 indicates? If this transaction DID NOT take place, please explain why it was included in the spreadsheet file entitled SO2 Deals-UE that was included in UE's response to OPC DR No. 2086. If this transaction DID take place, please explain why it did not appear in the 2006 SO2 sales totals that were included in the spreadsheet file entitled SO2 Sales-UE that was included in UE's response to OPC DR No. 2086.

Response:

Trade ticket FUS-158-X was required by Ameren Risk Management department to reconcile the physical delivery of a futures contract. FUS-158-X was the physical delivery of allowances associated with trade tickets FUS-147, 148, 150, 151, and 152-X. These transactions totaled 15,050 v08 and 150 v09 allowances. The difference in price reflects the CCFE SO2 futures market when the physical delivery was done. When margin call requirements and brokerage fees are taken into account, the allowances were sold at the pricing on the original tickets.

Date	Ticket #	Tons	Price	Sale Total
11/3/06	FUS-147-X	250	\$512	\$128,000
11/3/06	FUS-148-X	150	\$500	\$75,000
11/16/06	FUS-150-X	10000	\$453	\$4,530,000
11/16/06	FUS-150-X	1000	\$460	\$460,000
11/16/06	FUS-151-X	2000	\$453	\$906,000
11/17/06	FUS-152-X	1800	\$460	\$828,000
				\$6,927,000

Brokerage fees for these transactions totaled \$8,069.28.

The prices on ticket FUS-158-X are just an indication of the market at the time the EFP was done. The market prices are used by the exchange to calculate margin requirements, but do not have an impact on the amount of money received for the sale.

Prepared By: James C. Moore II

Title: General Executive

Date: 2/15/07

**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

AFFIDAVIT OF JAMES C. MOORE II

STATE OF MISSOURI)
) ss
CITY OF ST. LOUIS)

James C. Moore II, being first duly sworn on his oath, states:

1. My name is James C. Moore II. I work in St. Louis, Missouri and I am employed by Ameren Energy Fuels and Services Company as General Executive of Coal Supply and Emissions.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 10 pages and Schedules JCM-1, all of which have been prepared in written form for introduction into evidence in the above-referenced docket.

3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct.


James C. Moore II

Subscribed and sworn to before me this 27th day of February, 2007.


Notary Public

My commission expires: May 19, 2008

CAROLYN J. WOODSTOCK
Notary Public - Notary Seal
STATE OF MISSOURI
Franklin County
My Commission Expires: May 19, 2008