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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

REBUTTAL TESTIMONY

OF

MARTIN J. LYONS, JR.

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
February, 2007

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REBUTTAL TESTIMONY

OF

MARTIN J. LYONS, JR.

CASE NO. ER-2007-0002

I. INTRODUCTION AND SUMMARY

Q. Please state your name and business address.

A. My name is Martin J. Lyons, Jr. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63103.

Q. Are you the same Martin J. Lyons, Jr., who submitted Direct Testimony in this case on September 29, 2006?

A. Yes. My position and qualifications were described in that previous submission, which addressed the fuel adjustment clause (FAC) proposed by AmerenUE.

Q. What is the purpose of your rebuttal testimony?

A. My rebuttal testimony reviews and responds to arguments made in the December 29, 2006 direct testimonies of witnesses Michael Brosch, Ronald Binz, Maurice Brubaker, James Dauphanais, Ryan Kind, and Kevin Higgins in regard to AmerenUE's proposed FAC and proposed treatment of off-system sales (OSS). Some of these witnesses (Brubaker, Dauphanais, and Higgins) do not oppose AmerenUE's FAC request in principle but advocate various modifications to the Company's proposal, whereas other witnesses (Brosch, Binz, and Kind) contend that the proposed FAC should be rejected outright. I also will address Taum Sauk adjustments and related issues raised by some of the witnesses (Dauphanais and Higgins). Finally, I will briefly address the comments of Noranda Aluminum's consult Donald E. Johnstone relating to mitigating volatility of rate adjustments. Various FAC-related points raised

in the December 29, 2006 testimonies of other parties' witnesses are also addressed in the following February 5, 2006 rebuttal testimonies of other AmerenUE witnesses:

- The rebuttal testimony of **Professor John Mayo** responds to various concerns raised by other parties and assesses AmerenUE's proposal and FAC issues from an incentives and economic efficiency perspective;

- The rebuttal testimony of **Mr. Shawn Schukar** responds to intervenors' comments regarding OSS sharing and cost allocations (including the allocation of Midwest Independent Transmission System Operator, Inc. (MISO) costs); and

- **Mr. Robert Neff**'s rebuttal testimony addresses the uncertainty and volatility in today's fuel and fuel transportation markets.

Q. Please summarize your conclusions.

A. In response to the claims of various intervenor witnesses, my primary conclusions are as follows:

- The FAC is needed and is consistent with the mainstream of U.S. utility regulation. The overwhelming majority of states with non-restructured electric markets (27 out of 29, not counting Missouri) permit such adjustment clauses. (See Schedule MJL-3)

- As Mr. Neff's testimony documents, AmerenUE's fuel costs meet the widely-agreed on criteria (large, volatile, and largely outside of management control) for recovery through an adjustment clause. Intervenor arguments that AmerenUE is not significantly exposed to volatile fuel costs ignore the recent evidence of sharply increasing and volatile coal and transportation costs. Not surprisingly, the overwhelming majority of utilities in non-restructured states, including most utilities that rely primarily on coal-fired generation, utilize an FAC. (See Schedule MJL-4)

- Use of an FAC constitutes sound regulatory policy and is fully consistent with established ratemaking principles. By adjusting rates to reflect actual changes in fuel costs, an FAC leads to a better matching of costs and revenues than is achieved under existing ratemaking. This provides AmerenUE customers with better price signals as to the actual cost of their consumption and enables them to make better choices as to their consumption level or purchase of substitute goods.

- The FAC also helps to avoid frequent full rate cases due to material fluctuations in commodity prices. By avoiding frequent

rate cases, the current incentives to control costs provided by "regulatory lag" will be maintained for non-fuel-related costs. In addition, fewer rate cases will reduce the administrative burden on the Commission, the Company and other parties. These points are addressed more fully in Professor Mayo's rebuttal testimony.

- The FAC proposed by AmerenUE will not reduce the Company's incentives to operate efficiently, a point that is also addressed in Professor Mayo's rebuttal testimony. Non-fuel-related costs will continue to be subject to the incentives provided by regulatory lag. Moreover, the proposed treatment of OSS margins (either the fixed credit or the sharing approach) will maintain AmerenUE's strong incentive to maintain and improve the performance of its generating plants. This is because OSS volumes and profit margins are highly dependent on the performance of AmerenUE's generation fleet. AmerenUE's native load customers will benefit most from improved plant performance because they receive our lowest-cost generation resources.

- The FAC will not distort AmerenUE's resource planning or investment criteria. Resource plans are reviewed in great detail by the Commission Staff and other interested stakeholders to make sure that least-cost technologies are selected. In addition, AmerenUE's stake in OSS margins will also provide important incentives for the Company to maintain competitive energy costs and therefore invest in efficient generation technologies with competitive production costs.

- The FAC will not permit AmerenUE to shift costs and revenues between native load sales and OSS to the benefit of the Company's shareholders. As Mr. Schukar explains in his February 5, 2007 rebuttal testimony, AmerenUE has long had to allocate costs and revenues between native load sales and OSS under the Joint Dispatch Agreement (JDA) and these allocation processes are well established. Moreover, as I explained in my direct testimony, there are extensive minimum filing requirements associated with an FAC request and in subsequent true-up proceedings. Thus, there will be extensive documentation of AmerenUE's fuel and energy costs.

- The FAC is designed with provisions so that customers can be held harmless for the loss of the Taum Sauk pumped hydro plant. To hold customers harmless, the value of Taum Sauk will first be credited to reduce the Company's base revenue requirements. The native-load portion of that value will then also be reflected in the "R" factor of the FAC to assure that customers actually receive this value. The normalized test year value of Taum Sauk could be

applied to each year going forward, thus avoiding the need to recalculate Taum Sauk value every year. Alternatively, the value of Taum Sauk could be recalculated every year based on production cost simulations.

I consequently recommend that the Commission approve the Company's proposed FAC in combination with the traditional regulatory treatment to establish a fixed credit for OSS margins in base rates. Alternatively, OSS margins could be shared as suggested in the alternative sharing mechanism proposed by Mr. Schukar. The proposed FAC is consistent with the Commission's extensive rules governing FACs and the mainstream of utility regulation in other states. It will improve retail rates by making them more reflective of actual costs, it will support AmerenUE's credit strength by reducing cost recovery uncertainty to that faced by other utilities, and it will reduce the need for the Commission to process numerous rate cases. The proposed treatment of OSS margins will maintain the Company's strong incentive to achieve high plant performance, thereby controlling and reducing customer costs.

Contrary to some parties' claims, the FAC would not unduly "complicate" the ratemaking process in Missouri. To the contrary, the administrative effort involved in managing the FAC is more than outweighed by the reduced frequency of full rate cases.

Q. Is AmerenUE proposing any changes to the FAC described in your previous testimony?

A. No. However, I clarify how the FAC will account for the imputed output from the Taum Sauk plant. I also clarify and respond to other accounting and cost allocation issues raised by various parties in regard to the implementation of the proposed FAC.

II. THE FAC IS NEEDED AND IS CONSISTENT WITH THE MAINSTREAM OF U.S. UTILITY REGULATION.

Q. Do certain witnesses contend that the proposed FAC is not necessary?

A. Yes. Three witnesses – Messrs. Brosch, Binz, and Kind – argue that the FAC should be rejected, in part, because in their view it is neither necessary nor desirable. Of course, it is important to remember that the parties represented by those witnesses were not supportive of Senate Bill 179 or the Commission's rules implementing that legislation.

Q. What reasons do they provide in support of their assertion that an FAC is inappropriate for AmerenUE?

A. These witnesses assert that, because of its generation mix, AmerenUE is not significantly exposed to volatile gas and oil prices. They further argue that, to the extent that AmerenUE is exposed to volatile fuel prices, the Company has demonstrated that it can hedge such risks at a reasonable cost. A variant of this argument, advanced by Mr. Brosch, is that since AmerenUE has had no problem recovering its fuel costs in the past without an FAC, there is no reason why the Company needs one now. [Brosch Direct Testimony, December 29, 2006, p. 29, l. 8-15].

Q. What is your response to these assertions?

A. I will demonstrate that these assertions are without merit. But before doing so, I first observe that FACs are almost universally used in other states. Indeed, FACs are very much the norm in electric utility ratemaking, rather than the exception. As shown in Schedule MJL-3, all but two of the 29 traditionally-regulated states other than Missouri (*i.e.*, non-restructured states without retail competition) permit their electric utilities to recover fuel and purchased power costs through an FAC.[1] Adjustment clauses are even in effect in coal-rich states such as West Virginia, Indiana, and Kentucky. This prevalence of fuel adjustment clauses is also documented in various reports by Regulatory Research Associates (RRA), Standard & Poors

[1] The two states without FACs are Utah and Vermont. Of course, Missouri now has rules allowing the use of FACs.

(S&P), and Fitch.[2] In fact, as Schedule MJL-4 shows, most utilities with a fuel mix comparable to AmerenUE (*i.e.*, a significant amount of coal-fired generation) also have an FAC. As shown in Schedule MJL-4, of all 58 utilities in other non-restructured states for which data was available from the Federal Energy Regulatory Commission (FERC) and the Department of Energy (DOE), 51 utilities have an FAC. As shown in Schedule MJL-4-2, the coal capacity in non-restructured utilities' fuel mix was 45% in terms of installed capacity (compared to AmerenUE's 53%). Importantly, Schedule MJL-4-1 also shows that of 20 utilities in other non-restructured Midwestern states, 18 have an FAC; while Schedule MJL-4-2 documents that the coal generating capacity of non-restructured Midwestern utilities on average accounts for 58% of installed capacity, which exceeds AmerenUE's 53%.

Q. Would AmerenUE's proposed FAC be the first adjustment clause approved by Missouri regulators?

A. No. My understanding is that prior to 1979, fuel adjustment clauses were commonly utilized in Missouri by electric utilities, including AmerenUE. In addition, the state's gas distribution companies have had a Purchased Gas Adjustment (PGA) clause that allows them to flow through the commodity cost of natural gas in their retail rates since the 1960s. Thus, the Commission already is familiar with the type of adjustment mechanism proposed by AmerenUE.

Q. Mr. Brosch lists criteria for determining whether costs should be subject to recovery through a fuel adjustment clause. Do you agree with his criteria?

A. Yes, in general. Mr. Brosch acknowledges that FAC mechanisms are employed by state regulators when fuel and purchased energy costs are recognized to be: (1) large in

[2] Fitch Ratings, "U.S Electric Utilities: Credit Implications of Commodity Cost," February 13, 2006. Standard & Poor's, "Fuel And Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets--U.S. Electric Utilities To Watch," March 22, 2006. Regulatory Research Associates, "Fuel and Wholesale Power Cost Recovery: A State-By-State Review," October 3, 2005.

relation to the total cost to provide electric service; (2) subject to market forces (rather than management control); (3) volatile and difficult to quantify in rate cases; and (4) substantial enough to cause potentially significant earnings volatility if not tracked. [Brosch Direct Testimony, December 29, 2006, p. 8, l. 7-14]. These criteria are consistent with those set forth in my direct testimony and, as explained in the testimony of Professor John Mayo, are consistent with the regulatory literature on this topic. It is well recognized that costs that are substantial, volatile, and largely if not totally outside of a utility's control are the types of costs that are appropriately recovered through an adjustment clause.

Q. Does Mr. Binz also propose a similar set of criteria for determining whether costs should be subject to FAC recovery?

A. Yes, Mr. Binz asserts that adjustment mechanisms should only be used for costs that meet the following three qualifications: (1) they represent a significant portion of a utility's costs; (2) they fluctuate significantly; and (3) the costs are outside of the utility's control. [Binz Direct Testimony, December 29, 2006, p. 5, l. 11-15]. Thus, there is no fundamental disagreement among Mr. Brosch, Mr. Binz, and me, at least in principle, as to the types of costs that merit FAC recovery.

Q. Nonetheless, both Mr. Brosch and Mr. Binz oppose AmerenUE's FAC. In their view, why don't AmerenUE's fuel costs merit an FAC?

A. Both of these witnesses assert that AmerenUE's fuel costs are not particularly volatile. For example, Mr. Brosch claims that AmerenUE's fuel and fuel-related transportation and purchase power costs are relatively less volatile and more controllable by management than the fuel costs of other utilities. Mr. Brosch further claims that AmerenUE is less exposed to

volatile gas and oil prices than other utilities in the Midwest, because of its heavy utilization of coal-fired baseload generation. [Brosch Direct Testimony, December 29, 2006, p. 19, l. 14-20].

Q. What is your response to Mr. Brosch's assertion regarding AmerenUE's exposure to volatile fuel prices?

A. Contrary to Mr. Brosch's assertion, AmerenUE is exposed to volatile and uncontrollable fuel costs. Moreover, his contention that AmerenUE is less exposed to volatile gas and oil prices than other utilities in the Midwest is simply wrong. The Midwest region has an abundance of utilities with substantial coal-fired generation. As shown in Schedule MJL-4-2, with a 53% share of coal-fired generating capacity, AmerenUE is very similar to many Midwestern utilities, most of which operate in states that utilize an FAC. In fact, approximately 55% of the generating capacity in the Midwest ISO is coal-fired.[3]

Schedule MJL-4-2 compares AmerenUE's share of installed coal-fired generating capacity to that of all other utilities in non-restructured states (including Midwestern states) for which Energy Information Administration (EIA) and FERC Form 1 data was available. Schedule MJL-4-2 also shows whether the utilities operate under an FAC, and the extent to which they rely on coal generation. This schedule documents that most utilities in the Midwest have a similar or even higher percentage of coal-fired generation than AmerenUE. For example, Kentucky's electric utilities (Kentucky Power, Kentucky Utilities, and Louisville Gas & Electric) have an FAC even though they have a higher percentage of coal-fired generation than AmerenUE. Similarly, Indiana's electric utilities have an FAC (with the exception of Indiana Michigan Power, a subsidiary of American Electric Power) even though these companies all have a larger percentage of coal-fired generation than AmerenUE. Minnesota utilities, such as

[3] Midwest ISO 2005 State of the Market Report, p. 14.

Allete and Ottertail, are another example of utilities with an FAC and a very large proportion of coal-fired generation. So AmerenUE's utilization of coal-fired generation is not "heavy" or unusual by any standards. Indeed, AmerenUE's share of coal-fired generation is about average for the Midwest and well below the proportion of coal-fired capacity in the generation portfolio of many non-restructured utilities.

Q. Do utilities outside of the Midwest that utilize a high percentage of coal-fired generation also generally have an FAC?

A. Yes. Schedule MJL-4 also compares AmerenUE's installed generation capacity mix to that of other utilities in non-restructured states outside the Midwest. Compared to AmerenUE, coal comprises a much larger percentage of the generation mix for companies such as MDU Resources Group and Black Hills (which serve North and South Dakota) or Public Service of Colorado, all of which have FACs despite their heavy reliance on coal-fired generation. In fact, Schedule MJL-4-1 shows that of all 24 other utilities in non-restructured states with more than 50% coal generation capacity, a total of 21 currently utilize an FAC. There is simply no reason to believe that AmerenUE's fuel costs are any more predictable or less volatile than the fuel costs of these other coal-intensive utilities, such that an FAC would not be justified for AmerenUE.

Q. What do you conclude from the fact that the large majority of utilities in non-restructured states have FACs, irrespective of their electric utilities' fuel and resource mixes?

A. I conclude that most states have determined that it is in the public interest for their electric utilities to have an FAC, even if gas- and/or oil-fired generation does not comprise a large share of their electric utilities' generation portfolio. While gas and oil prices tend to be

particularly volatile, other fuel costs (and fuel transportation costs) also are sufficiently uncontrollable and volatile to justify an FAC.

Q. Are coal prices volatile?

A. Yes. Delivered coal prices, including both the commodity cost and transportation components of these costs, have become quite volatile and difficult to handle in traditional rate cases. This trend to increased volatility, including further increases in costs, is expected to continue. AmerenUE witness Robert K. Neff explains in his direct as well as in his February 5, 2006 rebuttal testimony how changes in coal and coal transportation costs are affecting the Company. AmerenUE's coal costs have increased substantially over the last several years and are expected to increase further over the next several years, as demonstrated by Mr. Neff's rebuttal testimony, which shows very significant increases in PRB Coal and PRB coal freight costs in just the last few years. Recent forecasts show that commodity coal prices and coal transportation costs are expected to continue to increase by 5% to 10% over the next several years. These analyses, coupled with AmerenUE's knowledge of the coal market, strongly suggest that coal costs are likely to increase through at least through 2010.

Indeed, Staff witness Michael Proctor, in his direct testimony, also showed that coal commodity costs have been quite volatile over the last several years. His Schedule 1.1, which relies on the cost of AmerenUE's spot purchases of coal, shows that prices increased from a range of 30 to 60 cents/MMBtu in 2004 to a range of 100 to 130 cents/MMBtu in late 2005 and early 2006. Since then, these prices have decreased again to the 40 to 80 cents/MMBtu range, demonstrating that the volatility in coal prices can result in decreases as well as increases in costs.

As Mr. Neff also explains in his rebuttal testimony, AmerenUE is also exposed to significant increases and volatility in coal transportation costs. However, coal costs are not only increasing, they are also very volatile. As shown in Mr. Neff's rebuttal testimony, since 2001, coal price volatility has reached levels normally only associated with the volatility of natural gas and crude oil. Importantly, a significant portion (approximately 15%) of coal transportation costs are also indexed to diesel fuel prices which, like oil and gasoline prices, are highly volatile and unpredictable. Without an FAC, I would anticipate that the increasing and unpredictable nature of these costs would force AmerenUE to file frequent rate cases for the foreseeable future simply in an attempt to adjust rates to keep pace with these cost changes.

Q. Mr. Binz says that he is unaware of any evidence that fuel and purchased power costs in Missouri are expected to fluctuate in the intermediate future. Has such evidence been submitted?

A. Yes. AmerenUE has submitted substantial evidence of recent fuel cost increases and decreases, as explained above.

Q. Do AmerenUE's fuel costs comprise a significant portion of the Company's total power production costs?

A. Yes. Fuel costs comprise 20% to 25% of AmerenUE's retail rates and close to one-third of its operating costs, which makes clear they are a very large category of costs.

Q. Mr. Brosch notes that AmerenUE enters into multi-year contracts to hedge and limit its exposure to spot coal prices. Does this risk management strategy eliminate the need for an FAC?

A. No. While AmerenUE's risk management strategy for coal procurement and coal transportation does limit the Company's exposure to spot market coal price fluctuations, this

does not change the fact that AmerenUE is facing increasing and uncertain coal commodity costs. Hedging does not enable AmerenUE to procure coal at a below-market price. Contracts for fuel or transportation expire periodically and must be renewed at then current market prices for various power plants. This means that in today's unpredictable environment of volatile coal prices and uncertain transportation costs, even a portfolio of long-term contracts leaves AmerenUE significantly exposed to fuel and transportation cost uncertainty. Long-term coal contracts certainly do not provide a complete hedge against delivered coal costs, particularly transportation costs. As noted, a large portion of transportation costs relate to railroad diesel-fuel adders, which are based on an index and are as volatile as oil and gasoline prices. And to the extent AmerenUE's portfolio contains some amount of spot market coal, this risk is exacerbated. This risk has been explicitly recognized by credit rating agencies and is mitigated through FACs for the large majority of other utilities, including other coal-based utilities which similarly will rely on risk-mitigating long-term contracts.[4] In fact, most coal utilities enter into multi-year contracts, but as shown above, this does not change the fact that FACs are the prevalent mechanism state regulatory commissions use to address these costs. I believe most state regulatory commissions implement FACs in part because it is difficult if not impossible to synchronize the expiration and renewal of fuel and transportation contracts at numerous power plants with rate cases. An FAC is a desirable, mainstream regulatory mechanism that would enable AmerenUE to reflect in retail rates the increased (or decreased) costs resulting from new coal contracts that reflect current market prices.

Q. Should approval of an FAC be made only based on an affirmative finding that AmerenUE's coal costs are volatile?

[4] Fitch Ratings, "U.S Electric Utilities: Credit Implications of Commodity Cost," February 13, 2006. Standard & Poor's, "Fuel And Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets--U.S.

A. No. As discussed above, coal prices have been unpredictable and volatile in recent years. However, an FAC is justified even if parties in this case cannot agree on the precise extent of this volatility. AmerenUE's cost of delivered coal has increased substantially in recent years and is expected to increase for a number of years. The data on spot market prices for coal presented in Mr. Neff's testimony also shows that market fundamentals are fluctuating substantially, which creates considerable uncertainty with respect to AmerenUE's future contract costs. In the absence of an FAC, this creates operating risks and cash flow risks for AmerenUE over which credit rating agencies have already voiced their concerns.[5]

The already identified increases over the next several years alone would likely require the Company to file several rate cases simply in an effort to keep up with rising fuel costs. Such frequent rate cases would impose considerable administrative costs and, as I discuss further below, also substantially reduce the efficiency incentives that regulatory lag would otherwise provide with respect to all other costs.

Q. Please comment on Mr. Brosch's assertion that AmerenUE has very slight exposure to any future volatility in gas and oil prices. [Brosch Direct Testimony, December 29, 2006, p. 28, l. 6-9].

A. AmerenUE does purchase a considerable amount of natural gas, particularly during hot summer conditions. For example, in 2006 AmerenUE purchased over $40 million of natural gas for its electric generation. With natural gas prices doubling in one year and declining a similar amount the next year, even these comparatively modest purchases of natural gas can create significant swings in annual fuel costs. Schedule MJL-4-2 shows that AmerenUE's

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Electric Utilities To Watch," March 22, 2006.

[5] Standard & Poor's rates AmerenUE's fuel price risk as "intermediate." See "Fuel And Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets--U.S. Electric Utilities To Watch," March 22, 2006.

reliance on natural gas is similar to most other coal-intensive utilities, most of which operate under an FAC. In addition, Mr. Brosch neglects to consider the fact that AmerenUE is further exposed to gas price uncertainty through energy market purchases. While AmerenUE is not a large buyer of energy, it is at times a net buyer in the spot energy market, particularly if AmerenUE's baseload power plants are on scheduled or forced outages. In the regional MISO energy market during on-peak hours, the marginal unit often will be gas-fired generation. Hence, AmerenUE is exposed to gas price volatility both through its own fuel purchases and through its purchase of power in the MISO energy market.

Q. How do you respond to Mr. Kind's assertion that UE has a program for hedging its gas costs and has not shown a significant vulnerability to gas costs?

A. Mr. Kind overlooks the fact that hedges reduce risk but not cost. Hedges limit AmerenUE's exposure to volatile spot prices but do not change the fact that gas costs are increasing and decreasing over time. They do not, for example, enable AmerenUE to procure gas at a below-market price when market prices are up. Moreover, other electric utilities presumably also hedge their gas costs but still have an FAC. Indeed, gas distribution companies in Missouri hedge their gas costs as well but still have a PGA to facilitate the recovery of their purchased gas costs, including the cost of hedges. The upshot is that most if not all utilities hedge volatile input costs, but such hedges do not eliminate the need for an FAC.

Q. Mr. Brosch claims that nuclear costs for the Callaway plant have been stable and are expected to remain stable. Is he correct? [Brosch Direct Testimony, December 29, 2006, p. 27, l. 11-12].

A. No. Mr. Brosch is overstating the stability of AmerenUE's nuclear fuel costs. While it is true that these costs are stable between refueling outages, nuclear fuel expenses can

and often do change after a refueling. Moreover, nuclear fuel expenses have been increasing—the market for milled uranium has experienced price increases that track increases in fossil fuel costs. Between 2001 and 2005, wholesale prices for milled uranium increased about 40%.[6] AmerenUE witness Randall Irwin discusses these issues in his rebuttal testimony.

Q. What is your response to Mr. Brosch's contention that AmerenUE has been able to recover its fuel costs in the past and therefore does not require an FAC?

A. The fact that fuel and purchase power prices were stable and/or declining in the past does not mean that they are stable and/or declining today or will be in the future. Mr. Brosch is ignoring the changes in fuel, fuel transportation, and power markets that are increasing the cost of these inputs and that are making them more volatile than they were in the past. The testimonies of Messrs. Neff and Schukar explain these shifts in market conditions in more detail.

Mr. Brosch also suggests that an FAC is not needed because rising fuel costs tend to be offset by customer and revenue growth and/or decreases in other costs. [Brosch Direct Testimony, December 29, 2006, p. 6, l. 3-10]. However, Mr. Brosch offered no evidence in support of this contention. Indeed, at his deposition, Mr. Brosch failed to cite even one cost item that is inversely related to fuel costs (*i.e.*, declines when fuel costs increase). [Brosch deposition, pp. 73-74]. This is not surprising, because in an inflationary environment all costs tend to increase, with some increasing at a faster rate than others. There is no basis to assume that rising fuel costs will be offset by, say, declines in labor costs, materials costs, insurance costs, property taxes, etc. Non-fuel operating costs are currently rising sharply and certainly are more likely to increase than decrease over time. Also, while it is true that AmerenUE's retail sales will grow over time (though not necessarily every year), it is by no means certain that increased revenues

[6] For example, see The Brattle Group, "Why Are Electricity Prices Increasing?" prepared for the Edison Foundation, June 2006, p.2.

will be sufficient to offset increases in costs, including fuel costs. As discussed in Mr. Baxter's rebuttal testimony, based on the recently-observed cost trends and utility rate trends, quite the opposite is more likely. This is particularly true during times when fuel costs are rising rapidly. Thus, contrary to Mr. Brosch's unsupported optimism, there is no basis whatsoever to believe that rising fuel costs will be offset by decreases in non-fuel operating costs and/or increased retail sales margins.

Q. You mentioned concerns raised by credit rating agencies. Is AmerenUE's credit quality under pressure by the current absence of an FAC?

A. Absolutely. While my testimony does not address credit rating or cost of capital issues, it is clear that a utility's ability to recover rising commodity costs is something that the credit rating agencies look at very closely when setting the Company's bond rating. Utilities that do not have an FAC, like AmerenUE, are viewed as having less protection against commodity price risk than those with an FAC. For example, a March 2006 Standard & Poor's report concluded that AmerenUE, despite its heavy reliance on coal and long-term contracts, had an "intermediate" exposure to fuel price risk because, compared to most other utilities, including other coal utilities, it does not have an FAC.[7] AmerenUE witnesses Ms. Kathleen McShane and Professor James Vander Weide also explain that, in the absence of an FAC, AmerenUE's cost of capital would be higher than their recommendations.

Q. Please summarize the reasons why the Commission should reject the contention that AmerenUE does not need an FAC.

A. An FAC is fully consistent with mainstream U.S. utility regulation. In fact, the large majority, 28 of the 30 (including Missouri), non-restructured states permit such adjustment

[7] Standard and Poor's, "Fuel And Purchased Power Cost Recovery In The Wake Of Volatile Gas And Power Markets--U.S. Electric Utilities To Watch," March 22, 2006.

clauses. AmerenUE's fuel costs meet the widely-agreed on criteria (large, volatile, and largely outside of management control) for recovery through an adjustment clause. Opponent's arguments that AmerenUE is not significantly exposed to uncertain and volatile fuel costs ignore the recent evidence of sharply increasing and volatile coal costs, including coal transportation costs. In addition, the availability of hedges is not a reason for rejecting the proposed FAC, because while hedges do limit AmerenUE's exposure to spot price volatility they do not limit the Company's exposure to rising or declining fuel costs. Moreover, the start or termination dates of fuel and transportation contracts cannot easily be synchronized with rate cases, which, as is recognized by industry analysts and credit rating agencies, leaves AmerenUE exposed to fuel cost recovery risks that are not faced by the majority of other Midwestern and non-restructured utilities.

III. THE FAC IS EQUITABLE AND FULLY CONSISTENT WITH ESTABLISHED RATEMAKING PRINCIPLES.

Q. What is your response to Mr. Brosch's assertion that an FAC is inconsistent with traditional ratemaking principles and will lead to a "mismatch" of costs and revenues.

A. I disagree. FACs clearly are in the mainstream of U.S. utility regulation and have been for some time. Even if this were not the case, Mr. Brosch still would be wrong because an FAC—by adjusting rates to reflect actual changes in fuel costs—actually leads to a better matching of costs and revenues than one would attain under Mr. Brosch's preferred ratemaking approach. That is, by adjusting rates more frequently to reflect changing fuel and purchase power costs, rates more accurately reflect the cost of providing service at any given point in time. This provides customers with better price signals as to the actual cost of their power consumption and enables them to make better economic choices as to their consumption level or

purchase of substitute goods (e.g., switching between electricity and natural gas). This also will allow customers to benefit more quickly when fuel costs decline.

It is hard to fathom how Mr. Brosch could say that an FAC is inconsistent with traditional ratemaking principles when, as I observed earlier, all but two of the other 29 non-restructured states permit their electric utilities to have FACs, and most utilities in non-restructured states are actually operating under an FAC. Even Missouri has long been utilizing fuel adjustment clauses in the regulation of its natural gas utilities and the Commission has now created regulatory rules under which FACs could be used by electric utilities.

Q. Does a more accurate matching of rates and costs achieve other important regulatory objectives?

A. Yes, it does. By creating a more timely match between costs and rates, an FAC fosters ratemaking that is consistent with the concept of "cost causality"—which, simply put, means setting rates such that customers pay the incremental costs that they actually impose on the utility, such as increased or decreased fuel cost and purchase power cost incurred to serve load. An FAC also could help mitigate rate shock during a period of steadily increasing fuel and purchase power costs by more gradually reflecting the underlying cost trends. While a utility without an FAC cannot recoup its past under-recovery of fuel costs, it could nevertheless require a significant rate increase if its rates were not adjusted during a multi-year period of increasing fuel costs. While an FAC will not prevent rate increases during times of rapid and severe changes in fuel prices, it will "smooth" the utility's rate profile during a period of steadily rising fuel and energy costs. This could avoid the customer "surprise" (and anger) associated with large but necessary rate increases. Similarly, an FAC will also allow customers to participate

more immediately in downward movements of fuel costs thereby, again, providing a better "matching" of costs and rates.

Q. What is your response to Mr. Brosch's assertion that the proposed FAC will be administratively complex and increase the complexity of AmerenUE's retail tariffs and bills? [Brosch Direct Testimony, December 29, 2006, p. 10, l. 5-17].

A. The proposed tariff rider (Rider A) is a simple adjustment to AmerenUE's existing retail tariffs and does not require any changes in the Company's existing retail rate structure. The formula used in the rider is simple and straightforward and does not require complex calculations or analyses. Moreover, the required auditing would be similar to the auditing performed now by Commission Staff. Administering fuel adjustment clauses is something almost all utilities in the country (and even gas utilities in Missouri) do routinely, so I do not share Mr. Brosch's concern about complexity. If anything, the proposed FAC should decrease the administrative burden on the Commission Staff and other parties by decreasing the frequency of full-fledged rate cases. As the Commission knows, full rate cases are very complex, expensive, and time-consuming affairs. Indeed, I believe a reduced administrative burden of fewer full rate cases should be viewed as one of the significant benefits of an FAC and is almost certainly one of the reasons why FACs are so widely used and have become part of the regulatory mainstream. So Mr. Brosch has it wrong, if not backwards; the FAC may very well reduce, not increase, administrative burden and complexity.

Q. What is your response to Mr. Brosch's contention that fuel costs likely will receive more scrutiny in a rate case than if they are recovered in an adjustment mechanism?

A. I believe that fuel costs will, if anything, receive greater scrutiny if recovered in an FAC because the annual FAC reconciliation cases will allow the Commission and interested parties to focus exclusively on fuel (and purchased power) costs. A full rate case, by contrast, will tend to be less frequent and require the review of all of AmerenUE's costs, which means less attention will likely be paid to fuel costs. In contrast, the annual FAC reconciliation cases will give stakeholders a timely and dedicated forum in which to review the Company's fuel costs.

Q. Please comment on the argument made by several witnesses (Mr. Brosch, Mr. Binz, and Mr. Kind) that the proposed FAC will significantly reduce AmerenUE's risk (by shifting it to customers) and all but guarantee cost recovery. As a result, they argue that AmerenUE's Return on Equity (ROE) should be adjusted downward.

A. The relationship between AmerenUE's ROE and the FAC is addressed in detail in the rebuttal testimony of AmerenUE's cost of capital witness Ms. McShane and the direct testimonies of both Ms. McShane and Professor Vander Weide. AmerenUE's proposed ROE assumes the existence of an FAC, so to the extent that the FAC reduces the Company's risk, this is already reflected in our experts' ROE recommendations. As they explain, this is the case because the vast majority of the utilities in their group of comparable companies used to measure the cost of capital already operate under an FAC.

In addition, the proposed FAC will provide dollar-for-dollar recovery of AmerenUE's prudent fuel and purchased power costs. AmerenUE will not earn any profit on fuel costs or power purchases. Further, fuel cost decreases, as well as increases, will be promptly reflected in our rates. This will clearly benefit customers in a declining fuel cost environment, such as we had in the late 1980s, during much of the 1990s, and in 2006 as fuel markets settled down a bit in the aftermath of rail disruptions and Hurricane Katrina. Finally, the proposed FAC

clearly will not "guarantee" that AmerenUE will earn its allowed ROE. Most U.S. electric utilities have FACs and even a cursory review of utility returns demonstrates that no utility's return has been "guaranteed" as a result of its FAC.

Q. Mr. Brosch has proposed a "tracker" mechanism for OSS in his December 29, 2006 testimony. What is that?

A. Mr. Brosch, who opposes AmerenUE's proposed FAC to reconcile recovered fuel costs with actual fuel costs, supports an FAC-like mechanism for OSS. Under his proposal, AmerenUE would compare its actual realized monthly off-system sales margins to the dollar amount ordered for inclusion in the rate case by the Commission. The entire variance in these two values would, on a monthly basis, be accumulated within a regulatory asset/liability account for consideration in the Company's next rate case, along with interest on the balance. In other words, the mechanism would track the company's OSS margins and make sure that the entire amount is passed through to customers in the next rate case.

Q. Does Mr. Brosch's "tracker" mechanism for OSS make any sense from a public policy perspective?

A. No. First, the proposal ignores that there are offsetting effects on the revenues that AmerenUE realizes or may realize from native load customers and the revenues from off-system sales. When native load sales are higher than the normalized sales utilized to determine base rates, the level of off-system sales goes down, and vice versa. Since the margins earned on off-system sales are generally below the margins earned on retail sales to native load customers, the use of a tracker mechanism for off-system sales would actually put the utility at greater risk than the risk it faces under existing ratemaking practice.

The second reason why a tracker on off-system sales would be poor public policy is that AmerenUE's treatment of OSS margins provides the Company with important incentives to maintain high plant performance and availability – particularly in the context of a fuel adjustment clause. Tracking OSS margins would entirely eliminate this incentive. This "incentives" point is addressed more fully in the rebuttal testimony of Professor Mayo. As he explains, the OSS incentive provides significant customer benefits because high plant performance will not only increase OSS margins, but also lower generation costs for AmerenUE's native load customers. Given how concerned Mr. Brosch seems to be about the possibility that implementing an FAC would reduce incentives (when, as Professor Mayo explains, it does not), it is quite surprising that he has no qualms about proposing an OSS tracker that would eliminate the very incentives created by the traditional ratebase treatment or sharing of OSS margins.

IV. THE FAC WILL NOT REDUCE AMERENUE'S INCENTIVES TO OPERATE EFFICIENTLY.

Q. Three witnesses (Mr. Brosch, Mr. Binz, and Mr. Kind) argue that the proposed FAC, by providing dollar-for-dollar recovery of AmerenUE's actual costs, would reduce if not eliminate the Company's incentive to control and reduce fuel and purchase power costs and to operate its generation portfolio in an efficient manner. What is your response?

A. AmerenUE recognizes the importance of incentives and has, in fact, addressed this issue through its filed proposal by (1) implementing an FAC to help avoid frequent rate cases that would greatly reduce efficiency incentives for non-fuel-related costs; and (2) providing strong overall fuel cost and power plant performance incentives through either the traditional

(fixed) or sharing treatment of OSS margins. Professor Mayo addresses these issues in more detail in his rebuttal testimony.

Q. Please explain how the avoidance of frequent rate cases enhances AmerenUE's incentive to operate efficiently.

A. All of these witnesses cite the incentive to control costs provided by "regulatory lag," *i.e.*, the time that elapses between rate adjustments. As Professor Mayo also explains, regulatory lag provides a utility a strong incentive to control costs because companies can enhance their earnings through cost reductions until rates are reset to costs in the next rate case. I agree with Mr. Binz that regulatory lag can benefit customers and the utility alike by supplying incentives similar to the incentives that competition provides in other industries. [Binz Direct Testimony, December 29, 2006, p. 11, l. 13-15]. However Mr. Binz (along with Mr. Brosch and Mr. Kind) ignores the fact that, in the absence of an FAC, AmerenUE will be forced to file frequent rate cases because of rising fuel costs, which is the environment that we appear to be in today. Frequent rate cases will diminish the incentive provided by regulatory lag because it will diminish the period between adjustments to base rates, thereby reducing the utility's share of savings that result from reduction to any non-fuel-related costs.

Q. So are you saying that an FAC actually enhances AmerenUE's incentive to operate efficiently?

A. Yes, in the following sense. We all agree that regulatory lag provides a utility an incentive to manage its costs effectively. Non-fuel operating costs (such as labor and material costs) and capital-related costs will not be recovered in the proposed FAC and thus will continue to be subject to the incentives provided by regulatory lag. However, those incentives will be reduced if not eliminated if AmerenUE has to file frequent rate cases just to recover rising fuel

costs. In a rate case, *all* prudently-incurred costs—both fuel and non-fuel operating costs—are adjusted to reflect their current levels. With an FAC, only fuel costs—costs which are largely beyond AmerenUE's control—are adjusted in a timely manner through the adjustment mechanism. The incentive provided by regulatory lag thus continues to apply to non-fuel operating costs. So incentives actually will be enhanced by the FAC because it may enable AmerenUE to go several years between rate cases and therefore give the Company an incentive to effectively manage all those non-fuel-related costs that are within its control.

Q. Please explain how the proposed treatment of OSS margins provides AmerenUE a strong incentive to maximize the performance and availability of its power plants.

A. Unlike fuel costs, which are primarily driven by market prices over which AmerenUE has no control, some of the primary factors driving OSS are largely under the Company's control. These factors include plant capability, plant availability, and plant efficiency (*i.e.*, overall plant performance), as well as the marketing of available resources in bilateral off-system energy and capacity markets. While overall plant performance also affects native load-related costs, plant performance has the most significant impact on off-system sales. This is because off-system sales can be made only after native load is served. As a result, providing incentives through OSS margins is a very effective way to provide overall plant performance incentives, which simultaneously will help to reduce native load-related fuel costs and expand off-system sales opportunities.

It is important to recognize that AmerenUE's OSS are the sales it can make only after using its lowest-cost resources (*i.e.*, nuclear and coal-fired generation) to serve the Company's native load. As a result, total OSS volumes and profit margins will be dependent on

the performance of AmerenUE's generation fleet. Everything else equal, high plant availability and plant efficiency (heat rate), particularly among the Company's nuclear and coal-fired base-load generating capacity, will make more generating capacity available for off-system sales and, thus, increase AmerenUE's OSS volumes and margins. In other words, if even one power plant serving native load becomes unavailable or its capacity is reduced, resources that could otherwise be used to sell off-system will now be needed to serve native load. This will immediately and disproportionately reduce the generating capacity available to make off-system sales and to an even larger extent reduce the associated OSS margins. Thus, while plant outages have a moderate effect on native-load-related fuel costs (e.g., by replacing the lower-cost plant that was used to serve native load with a higher-cost coal plant that was previously used to sell off-system), the effect on off-system sales is much more severe (i.e., by reducing OSS volumes by the entire mega-watt amount that is subject to the outage). In other words, because off-system sales are made on the "margin," AmerenUE's plant availability affects OSS more directly and more materially than native load sales.

A similar link between OSS incentives and native load benefits exists with respect to improving plant efficiency, and to the limited extent the Company can control fuel costs with respect to reducing those fuel costs. If AmerenUE can maintain high plant efficiency, off-system sales opportunities will be enhanced because the plants will be more "competitive" in the regional wholesale power markets. Consequently, because the same plants serve both native load (e.g., during the peak hours or seasons) and off-system sales (e.g., during off-peak hours or seasons), OSS incentives will also result in direct benefit to native load.

Q. Can you provide an example.

A. Certainly. Assume two of AmerenUE's low-cost Labadie units are unexpectedly forced out of service. For native load the only difference likely would be that output from the Labadie units are simply replaced with output from a coal plant that was previously used to make off-system sales. Thus, while native load fuel costs will increase, the increase will be relatively small because AmerenUE will replace Labadie's output with slightly more expensive generation, which will then be averaged in with the cost of all other generation serving the Company's native load. In contrast, the impact on OSS is large because the absence of the Labadie units will significantly decrease the amount of coal-fired generation available for sale in the off-system market or significantly increase the costs to make off-system sales (such as the use of gas-fired generation).

In short, since off-system sales are on the margin, the loss of a base-load unit will have a much larger impact on OSS than on native load fuel cost.

Q. How does AmerenUE propose to treat OSS margins to provide these incentives?

A. As discussed in Mr. Schukar's and my direct testimonies, AmerenUE's preferred treatment of OSS would establish a fixed OSS credit in the Company's base rates, which is how OSS margins have been treated in the past. The fixed credit reflects our normalized test year OSS margins, which is $183 million. Any OSS margin above that level would be retained by shareholders while shareholders would be at risk for any margins below $183 million. As Mr. Schukar and I have similarly explained in our direct testimonies, we have also offered an alternative approach in which OSS margins between $120 million and $360 million would be shared between shareholders and ratepayers. UE shareholders would retain only 20% of OSS margins between $121 million and $183 million and 50% of all margins between $184 million

and $360 million. AmerenUE ratepayers would receive 100% of all margins up to $120 million, as well as 100% of all margins over $360 million. This OSS margin sharing proposal would share risks between the Company and its customers but retain strong incentives to maximize its OSS through exceptional plant performance.

Q. I can see that AmerenUE shareholders benefit from additional OSS, but please explain how customers benefit under AmerenUE's preferred treatment of OSS, given that none of the OSS margins in excess of the $183 million base amount would be shared with customers.

A. It is true that under AmerenUE's preferred treatment of OSS, the customer's OSS benefit would be fixed between rate cases at our estimated baseline margin of $183 million. Note, however, that customers receive this benefit even if AmerenUE's actual OSS margins fall below $183 million. Shareholders, not customers, bear the risk that AmerenUE will not realize an annual OSS margin of at least $183 million.

Moreover, AmerenUE's native load customers will benefit directly from expanded OSS because, as I explained above, AmerenUE will have strong incentives to achieve high levels of plant performance to maximize its OSS. Improved plant performance also means that AmerenUE's native load customers will immediately benefit because the improved performance will also reduce native-load-related generation costs. Thus, while the large majority of native load-related fuel costs are outside the Company's control (i.e., driven by the market prices for fuel and transportation), the Company's efforts to improve the cost-effectiveness and availability of its generation fleet in response to the OSS incentive will serve to reduce any controllable portion of fuel costs to native load customers, which will be passed through in rates through the FAC. That higher level of OSS margins will then also be factored into the

establishment of base rates in the next rate case, which will need to be filed within four years under the Commission's FAC rules.

Q. Would the Company's proposed sharing mechanism for OSS margins provide similar customer benefits?

A. Yes, the proposed sharing mechanism retains strong incentives to maximize OSS, though not as strong as the incentive provided under the traditional treatment of OSS margins. However, customers would benefit through both (1) their share of OSS margins and (2) the reduced energy costs resulting from improved plant performance as discussed above.

Q. Are the incentives provided under either of AmerenUE's proposed approaches for OSS margins consistent with the incentives provided by competitive markets?

A. Yes, as is explained further in the rebuttal testimony of Professor John Mayo. The incentives provided by both of the proposed treatments for OSS margins (i.e., the traditional fixed base rate offset and the sharing mechanism) are very similar to the incentives that AmerenUE would have in a competitive market, *i.e.*, in both cases AmerenUE would be incented to maximize generation margins by minimizing its supply cost through high plant availability and plant efficiency.

Q. Several witnesses for the other parties in their December 29, 2006 testimonies either claim that off-system sales incentives are not necessary or testify that the Company's sharing proposal should be modified. How does the Company respond to these testimonies?

A. We disagree. Mr. Schukar's February 5, 2007 rebuttal testimony addresses these points made by the various other parties' witnesses in their December 29, 2006 testimonies. He

explains why the Company's proposed OSS treatment (i.e., the proposed traditional fixed offset or the alternative sharing mechanism) is needed and why the alternative sharing proposals put forth by several witnesses are inferior to the OSS treatments proposed by AmerenUE.

V. THE FAC WILL NOT DISTORT AMERENUE'S RESOURCE PLANNING OR INVESTMENT CRITERIA.

Q. What is your response to Mr. Binz's assertion that the proposed FAC will distort AmerenUE's investment decisions in favor of fuel-intensive technologies because of the greater assurance accorded to fuel cost recovery?

A. Mr. Binz is mistaken for several reasons. First, resource planning is a separate regulatory process under which AmerenUE's resource plans are reviewed in great detail by the Commission and other interested stakeholders to make sure least-cost technologies are selected. It would quickly become apparent if AmerenUE was biasing its economic evaluation of alternative resources to favor certain technologies just to maximize the amount of costs that could be passed through an FAC. At the very least, Commission Staff and other stakeholders would raise questions about AmerenUE's resource plan if it seemed to indicate a bias toward fuel-intensive technologies, particularly in an environment of rising and volatile fuel prices.

Second, AmerenUE's incentive to increase off-system sales will also provide strong incentives for the Company to maintain competitive energy costs and therefore invest in efficient generation technologies with competitive production costs. Having a generation fleet with high fuel costs clearly would not facilitate OSS.

Finally, Mr. Binz overlooks the fact that the absence of an FAC adversely affects AmerenUE's cash flows and credit strength (a principal concern of the credit rating agencies) due to uncertain and likely incomplete recovery of fuel costs. Inadequate cash flow and worsened credit strength that would result from *not* having an FAC would more likely distort

AmerenUE's resource planning against technologies with high investment costs. Tight cash flow and weak credit could cause AmerenUE to forgo capital-intensive generation investments as well as discretionary efficiency-enhancing investments that could lower costs in the long term. Thus, the absence of an FAC could well lead to the "distorted" resource choices and investments feared by Mr. Binz.

Q. Witnesses Brosch and Binz claim that the combination of poor incentives and distorted resource allocation and planning would inevitably lead to higher costs and higher customer rates in the long term. Is that claim supported by any evidence?

A. No, absolutely not. To the contrary, Schedule MJL-4 shows that just the opposite appears to be the case. This schedule ranks utilities in non-restructured states by the level of their average retail rates. In particular, the schedule shows that almost all of the lowest-cost, traditionally-regulated utilities in the country operate under an FAC. Schedule MJL-4-1 shows that out of the 58 utilities in non-restructured states other than Missouri for which data was available from DOE and FERC, a total of 51 operate under an FAC. Of the 20 utilities in other Midwestern non-restructured states, 18 have an FAC. As shown in Schedule MJL-4-2, most of these utilities (like AmerenUE) also heavily rely on coal-fired generation. Importantly, Schedule MJL-4-1 also shows that of the 25 utilities with the lowest average retail rates, 22 utilities have an FAC (not including Missouri utilities). These data clearly refute the unsupported claim that an FAC would inevitably lead to higher customer rates in the long term. Quite the opposite is the case--almost all of the lowest-cost utilities in the country have an FAC.

VI. TAUM SAUK ISSUES.

Q. Several witnesses (Mr. Brosch, Mr. Kind, Mr. Higgins, and Mr. Dauphanais) are concerned about how the Company would ensure that customers are held harmless

from the effects of the loss of the Taum Sauk Plant after an FAC is implemented. What is your understanding of these concerns?

A. To implement its hold harmless commitment, AmerenUE calculated its baseline energy costs as if the Taum Sauk Plant were in operation. The FAC, generally speaking, would allow AmerenUE to collect or refund the difference between the fuel costs allowed in base rates and actual fuel costs. The witnesses identified above appear to be concerned that implementing an FAC would allow AmerenUE to "take back" the credit provided for Taum Sauk in base rates. That is, absent some sort of adjustment for Taum Sauk, there appears to be a concern that the FAC reconciliation mechanism would enable AmerenUE to recover its actual fuel costs, which would reflect the reality that Taum Sauk is not currently operating.

Q. How does AmerenUE propose to account for Taum Sauk in the FAC to ensure that customers are in fact held harmless?

A. First, let me say I agree that there needs to be an adjustment for Taum Sauk in the FAC reconciliation mechanism. Second, I would like to stress that the FAC formula proposed by AmerenUE specifically provides for such adjustments. As shown in Schedule MJL-1-1 and 1-3 to my direct testimony, AmerenUE has included in its FAC formula an "R" factor that flows through to customers any "modifications due to adjustments ordered" by the Commission. Holding customers harmless from the effects of Taum Sauk will be such an adjustment.

Q. What adjustments to revenue requirement does AmerenUE propose to ensure that customers are held harmless from the effects of Taum Sauk?

A. We propose that the full value of Taum Sauk generation be subtracted from the normalized test year revenue requirement, which means customers' base rates are as low as they would be if Taum Sauk was still in operation. The Taum Sauk generation value is determined

through production cost modeling, with and without the Taum Sauk plant. As reflected in the Company's response to Data Request AG-83, this value is $21.4 million for the normalized test year. Based on AmerenUE's production cost modeling, $7.9 million (or 37% of the total Taum Sauk value) is realized through lower native load-related fuel costs, while the rest ($13.5 million or 63%) is reflected through higher OSS margins. Because the normalized test-year OSS margins are credited against the Company's revenue requirement, base rates are lowered by $21.4 million. These values will be updated as the remainder of the revenue requirement is updated within this rate case.

Q. How would this Taum Sauk value be updated on a going-forward basis?

A. With respect to how the Taum Sauk value will be reflected in the FAC to hold customers harmless on a going-forward basis, AmerenUE suggests that the value determined in this proceeding could also be applied in the FAC true-up and reconciliation calculations going-forward until the next rate case or, if sooner, until Taum Sauk is placed back in service. This would guarantee that the Commission-approved test-year value of Taum Sauk is realized by customers each year going-forward. This approach would avoid having to recalculate the Taum Sauk value every year but would nevertheless hold customers harmless because, even though the plant's actual value in each of the next years would likely differ from the approved test-year value, these deviations should average out over time. If this "test-year value" approach is not acceptable to the Commission, however, AmerenUE would propose that production cost modeling be used each year to "true up" the value of Taum Sauk to the test-year value in the context of the annual FAC reconciliation efforts.

Q. Based on the calculated Taum Sauk value, what dollar amount would be reflected in the R-factor of the FAC?

A. Based on the calculated value that Taum Sauk would provide to AmerenUE, the R-factor of the FAC formula would reflect the $7.9 million savings to native load fuel costs created by the plant. As noted above, under AmerenUE's proposed traditional regulatory treatment of OSS margins (i.e., through a fixed offset of test-year OSS margins in base rates), customers would receive the remaining $13.5 million annual Taum Sauk value by virtue of lower base rates. If, in the alternative, an OSS margin sharing mechanism were implemented, that $13.5 million OSS value of Taum Sauk would need to be added from realized OSS margins before OSS sharing amounts are determined. As noted above, AmerenUE proposes that these Taum Sauk value components be approved by the Commission in this rate case and used each year on a going-forward basis. This would guarantee these amounts to customers, even though actual amounts could be higher or lower. In the alternative, these values also could be recalculated through production cost modeling every year.

Q. Could you please explain in greater detail how AmerenUE would calculate Taum Sauk value, either for an updated test year or every year on a going-forward basis?

A. AmerenUE proposes to use the following method to calculate the necessary adjustment for the Taum Sauk outage. In particular, the Taum Sauk value would be calculated for the updated normalized test year (or at the end of each FAC reconciliation period) using AmerenUE's PROSYM production cost model, as follows:

- Step 1- Data used for the period would reflect the following: hourly loads, hourly market prices, generating minimum and maximum outputs, generation unit input/output curves, unit dispatch costs, unit accounting fuel costs, and unit outage data. If used on a going-forward basis, the data would reflect the actual data for the valuation period.

- Step 2 – Run the PROSYM production cost model using the data collected in Step 1. If this process is used on a going-forward basis, the PROSYM results would be compared with the actual data for the period being evaluated. If the results are not acceptable, the inputs would be reviewed and updated and Step 2 would be repeated.

- Step 3 – The calibrated PROSYM run is run "without off-system sales." The "without off-system sales" case is used to determine how much of the Taum Sauk outage cost is related to costs associated with serving native load.

- Step 4 – The calibrated PROSYM run from Step 2 is run with the Taum Sauk plant placed in service. The Taum Sauk operational data includes: generating limits, pumpback limits, and efficiency (i.e., pump-back/generation ratio). A second Taum Sauk PROSYM run is then made "without off-system sales".

- Step 5 – The Taum Sauk outage impact on native load costs is calculated using the differences between the "without off-system sales" PROSYM run with Taum Sauk out of service and Taum Sauk in service. The Taum Sauk outage cost impact on off-system sales would be calculated using the "with off-system sales" PROSYM run with Taum Sauk out of service and Taum Sauk in service and the Taum Sauk native load costs. (Note: the "with sales" cases include off-system sales as well as native load costs.)

Q. Commercial Group witness Mr. Higgins testifies that the FAC formula is incomplete and that a "D" factor should be added to account for Commission disallowances and adjustments such as Taum Sauk. Is it necessary to add the "D" factor to the FAC formula?

A. No. Mr. Higgins' D-factor would be duplicative of the R-factor that is already included in the FAC formula. As stated explicitly, the "R" factor includes "modifications due to adjustments ordered as a result of required prudence reviews." This clearly can and, in fact, is meant to be used for the type of adjustments that would be covered by Mr. Higgins' D-factor. If such a D-factor were to be added to the formula, one would need to make sure that such disallowance-related adjustments are not subtracted twice, once in the R-factor and then again in the D-factor.

VII. VOLATILITY MITIGATION.

Q. What is your response to Mr. Johnstone's suggestion that any FAC should include provisions that will limit the exposure of customers to sharp or extraordinary increases utilizing either a fixed cap on rate increases or a design that limits volatility?

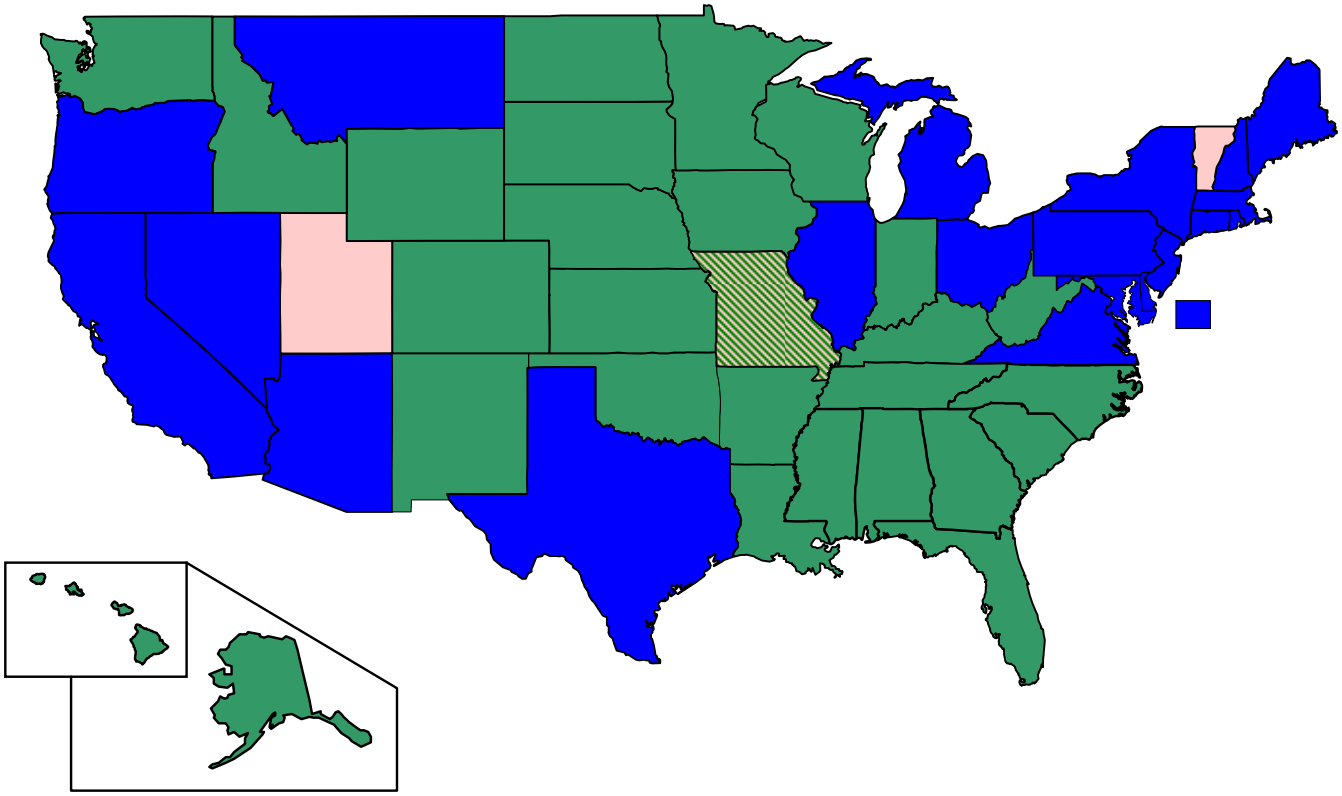
A. I would acknowledge that large upward unexpected swings in rates can be difficult for some customers to absorb into their monthly budgets. In some ways the use of an FAC actually helps customers avoid rate shocks by gradually recognizing gradual increases in fuel costs over time. However, even with use of an FAC there could be meaningful increases (or decreases) in rates when new fuel contracts come into effect. As such, if the Commission feels that limitation be placed on quarterly upward adjustments in the FAC tariff, AmerenUE would not be opposed. However, we would strongly oppose a mechanism that denied timely recovery of prudently incurred fuel costs. Consequently, we would recommend a mechanism that caps quarterly upward movements of the FAC tariff at a reasonable percentage, provides for deferral of unrecovered costs with interest, and provides for amortization and certain recovery of such deferrals over a relatively short period of time.

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

Rate Adjustment Mechanisms for Electric Utilities

September 2006



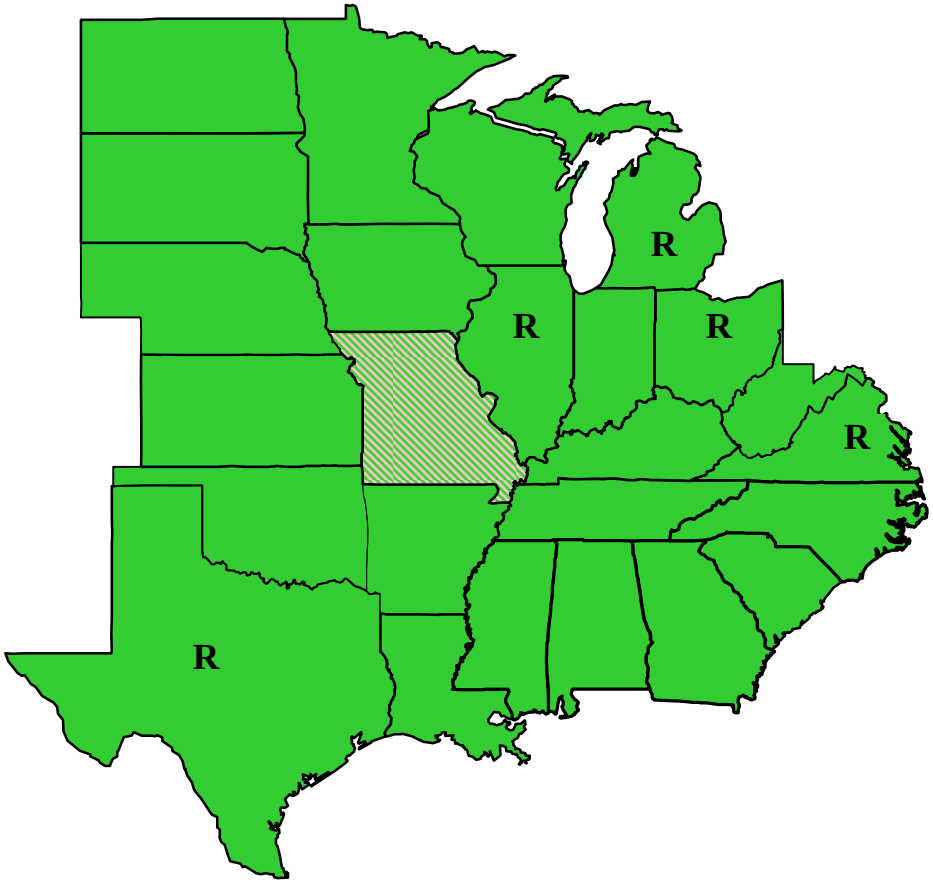
Legend

Code	Description	Number of States
	Rate Adjustment Legislation Enacted in 2005	**1**
	No Rate Adjustment Mechanisms Allowed	**2**
	Rate Adjustments for Fuel and/or Purchased Power	**27**
	Restructured or Partially Restructured States—Various types of rate adjustment mechanisms used to adjust retail rates with changes in procurement costs	**21**

Source: *The Brattle Group* (based on interviews with State Commission Staff, reports by Regulatory Research Associates and NARUC, and EIA and State Commission websites)

Schedule MJL-3-1

Rate Adjustment Mechanisms for Electric Utilities
In Central and Southeastern United States
September 2006



Legend

Code	Description	Number of States
	Rate Adjustment Legislation Enacted in 2005	**1**
	Rate adjustments for Fuel and/or Purchased Power Costs	**24**
R	Restructured or Partially Restructured States	**5**

Source: *The Brattle Group* (based on interviews with State Commission Staff, reports by Regulatory Research Associates and NARUC, and EIA and State Commission websites)

Fuel Adjustment Clauses and Consumer Protection Measures in Non-Restructured States

September 2006

State	Type of Rider	Rate Case Requirements		Historic or Projected Costs	Earnings Test
		Initially	Periodic		
Alabama	F,PP		No	Projected	No
Alaska	F,PP	Yes	No	Projected	No
Arkansas	F,PP	Unknown	No	Projected	No
Colorado	F,PP	No	No	Projected	No
Florida	F,PP	No	No	Projected	No
Georgia	F,PP	No	No	Projected	No
Hawaii	F,PP		No	Projected	No
Idaho	F,PP	No	No	Projected	No
Indiana	F,PP	No	No	Projected	Yes [A]
Iowa	F,PP	No	No	Projected	No
Kansas	F,PP	No	No	Projected	No
Kentucky	F,PP		No	Historic	No
Louisiana	F,PP	No	No	Historic	No
Minnesota	F,PP	No	No	Historic	No
Mississippi	F,PP		No	Projected	No
Missouri	F,PP	Yes	Yes	Historic	No
Nebraska [B]	F,PP	[B]	[B]	Projected	[B]
New Mexico	F,PP		No	Projected	No
North Carolina	F,PP	No	No	Projected	No
North Dakota	F,PP	No	No	Projected	No
Oklahoma	F,PP	No	No	Projected	No
South Carolina	F,PP		No	Projected	No
South Dakota	F,PP	No	No	Historic	No
Tennessee	PP		No	Projected	No
Utah	[C]	[C]	[C]	[C]	[C]
Vermont	[D]	[D]	[D]	[D]	[D]
Washington	PP	Yes	No	Projected	No
West Virginia	F,PP	No	No	Projected	No
Wisconsin	F,PP	No	No [E]	Projected	Yes [E]
Wyoming	PP		No	Projected	Yes

Source: *The Brattle Group* (based on interviews with State Commission Staff, reports by Regulatory Research Associates and NARUC, and EIA and State Commission websites)

Notes: No entry indicates the information has not been collected. Authorized riders are F: Fuel and PP: Purchased Power.

Rate adjustment legislation in Missouri enacted in 2005.

[A] In Indiana, an earnings test is explicitly required by statute for the FAC.

[B] Nebraska does not have any investor-owned utilities, but Nebraska Public Power District has an inactive Production Cost Adjustment.

[C] Utah has no FAC in place, but PacifiCorp has been allowed to recover replacement power costs through temporary rate increases.

[D] In Vermont, FACs are prohibited.

[E] In recent years, allowed ROEs frequently exceeded 12%. A periodic rate case requirement was adopted independently of the Wisconsin fuel rules.

Fuel Adjustment Clauses Used by Utilities in Other Non-Restructured States

States Included in Summary	*Number of Utilities*	*Number of Utilities with a FAC*
Non-Restructured States (Excluding Missouri)	**58**	**51**
Non-Restructured Midwestern States (Excluding Missouri)	**20**	**18**
25 Utilities in Non-Restructured States with Lowest Rates (Excluding Missouri)	**25**	**22**
Non-Restructured States with Utilities with more than 50% Coal Capacity (Excluding Missouri)	**24**	**21**

Source: Schedule MJL-4-2.

Fuel Adjustment Clauses Used by Utilities in Non-Restructured States

Utility	Primary State	2005 Total Rate (cents/KWh)	Ranking by Rates	% of Nameplate Generation Capacity				Fuel Adjustment Clause?
				Nuclear	Coal	Natural Gas	Other	
[1]	[2]	[3]	[4]	[5]				[6]
Wheeling Power Co (AEP)	WV	4.14	1	n/a	n/a	n/a	n/a	Yes
Kingsport Power Co (AEP)	TN	4.44	2	n/a	n/a	n/a	n/a	Yes
Allete Inc	MN*	4.58	3	0%	82%	0%	18%	Yes
Superior Water Light & Power Co	WI*	4.66	4	n/a	n/a	n/a	n/a	Yes
Consolidated Water Power Co	WI*	4.66	5	0%	0%	0%	100%	Yes
Kentucky Power Co (AEP)	KY	4.86	6	0%	100%	0%	0%	Yes
Kentucky Utilities Co	KY	4.99	7	0%	65%	33%	2%	Yes
Idaho Power Co	ID	5.02	8	0%	35%	9%	56%	Yes
Monongahela Power Co	WV	5.36	9	0%	100%	0%	0%	No
Indiana Michigan Power Co (AEP)	IN*	5.46	10	32%	67%	0%	1%	No
Duke Energy Indiana	IN*	5.58	11	0%	74%	22%	4%	Yes
Westar Energy Inc	KS*	5.58	12	0%	61%	32%	7%	Yes
Louisville Gas & Electric Co	KY	5.62	13	0%	76%	22%	2%	Yes
AmerenUE	MO*	5.69	14	12%	53%	29%	7%	No
Indianapolis Power & Light	IN*	5.82	15	0%	81%	12%	7%	Yes
Southwestern Electric Power Co (AEP)	LA	5.96	16	0%	61%	39%	0%	Yes
Duke Energy Kentucky	KY	6.00	17	n/a	n/a	n/a	n/a	Yes
Avista Corp	WA	6.00	18	0%	13%	32%	55%	Yes
Kansas Gas & Electric Co	KS*	6.03	19	21%	44%	3%	32%	Yes
Duke Energy Carolinas	NC	6.06	20	27%	38%	19%	15%	Yes
Southern Indiana Gas & Electric Co	IN*	6.16	21	0%	76%	24%	0%	Yes
Kansas City Power & Light Co	MO*	6.19	22	13%	54%	20%	13%	No
MDU Resources Group Inc	ND*	6.35	23	0%	76%	23%	0%	Yes
Otter Tail Power Co	MN*	6.39	24	0%	80%	7%	14%	Yes
Entergy Arkansas Inc	AR	6.42	25	38%	25%	35%	1%	Yes
Northern States Power Co (Wisconsin)	WI*	6.42	26	0%	5%	41%	55%	No
Puget Sound Energy Inc	WA	6.42	27	0%	34%	48%	18%	Yes
Public Service Co of Oklahoma (AEP)	OK	6.48	28	0%	24%	75%	1%	Yes
Alabama Power Co	AL	6.50	29	14%	56%	18%	13%	Yes
Oklahoma Gas & Electric Co	OK	6.57	30	0%	42%	58%	0%	Yes
Northern States Power Co (Minnesota)	MN*	6.80	31	28%	47%	18%	6%	Yes
Northern Indiana Public Service Co	IN*	6.87	32	0%	91%	9%	0%	Yes
Aquila Inc	MO*	6.89	33	0%	46%	51%	4%	No
Black Hills Power Inc	SD*	7.00	34	0%	64%	34%	2%	Yes
Wisconsin Public Service Corp	WI*	7.01	35	0%	70%	25%	4%	Yes
Mississippi Power Co	MS	7.04	36	0%	47%	53%	0%	Yes
Empire District Electric Co (The)	MO*	7.05	37	0%	32%	67%	1%	No
Public Service Co of New Mexico	NM	7.10	38	19%	51%	30%	1%	No
Interstate Power & Light Co	IA*	7.11	39	0%	60%	25%	15%	Yes
Progress Energy Carolinas	NC	7.13	40	24%	40%	27%	10%	Yes
Georgia Power Co	GA	7.15	41	12%	61%	13%	14%	Yes
Wisconsin Electric Power Co	WI*	7.43	42	17%	54%	23%	6%	Yes
South Carolina Electric & Gas Co	SC	7.61	43	12%	28%	31%	29%	Yes
Gulf Power Co	FL	7.70	44	0%	76%	23%	1%	Yes
Public Service Co of Colorado	CO	7.72	45	0%	67%	24%	9%	Yes
Wisconsin Power & Light Co	WI*	8.06	46	0%	62%	36%	2%	Yes
Entergy Gulf States Inc	LA	8.11	47	13%	9%	78%	0%	Yes
Entergy New Orleans Inc	LA	8.21	48	0%	0%	100%	0%	Yes
Entergy Louisiana Inc	LA	8.34	49	18%	0%	69%	13%	Yes
Cheyenne Light Fuel & Power Co	WY	8.52	50	n/a	n/a	n/a	n/a	Yes
Entergy Mississippi Inc	MS	8.80	51	0%	12%	61%	28%	Yes
Tampa Electric Co	FL	8.81	52	0%	45%	50%	5%	Yes
Progress Energy Florida	FL	8.87	53	8%	24%	40%	28%	Yes
Madison Gas & Electric Co	WI*	8.88	54	0%	45%	40%	15%	Yes
Florida Power & Light Co	FL	8.94	55	13%	4%	49%	34%	Yes
CLECO Power LLC	LA	9.01	56	0%	25%	75%	0%	Yes
Savannah Electric & Power Co	GA	9.52	57	0%	48%	52%	0%	Yes
Green Mountain Power Corp	VT	10.38	58	0%	0%	0%	100%	No
Texas New Mexico Power Co	NM	10.40	59	n/a	n/a	n/a	n/a	No
Central Vermont Public Service Corp	VT	11.65	60	19%	0%	0%	81%	No
Hawaiian Electric Co Inc	HI	15.56	61	0%	0%	0%	100%	Yes
Maui Electric Co Ltd	HI	24.10	62	0%	0%	0%	100%	Yes
Average, All Non-Restructured States		7.33		6%	45%	30%	18%	
Average, Midwestern States*		6.36		5%	58%	24%	14%	

Sample includes all investor-owned utilities in non-restructured states for which rate data was available in 2005 and total retail sales were greater than 500,000 MWh.
[1]: Investor-owned utilities in non-restructured states.
[2]: State with the largest number of retail sales as reported in the 2005 EIA 861.
[3]: 2005 total average retail rates, all states. Data from EIA 861 as reported in Global Energy Decisions, Inc.'s *Velocity Suite*.
[4]: Ranked by [3].
[5]: Capacity as a percentage of total owned nameplate capacity. Data from the *Velocity Suite*.
[6]: Active fuel adjustment clause.
Sources: Utility tariffs, state commission websites, FitchRatings: U.S. Electric Utilities-Credit Implications of Commodity Cost Recovery, 2/13/2006, and Regulatory Research Associates: Fuel and Wholesale Power Cost Recovery, October 3, 2005.
*Midwestern states based on DOE's definition of East North Central and West North Central. Includes IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, and WI.

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 Natural Gas Service Provided to Customers in the Company's Missouri Service Area.	)))))	Case No. ER-2007-0002

AFFIDAVIT OF MARTIN J. LYONS, JR.

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

Martin J. Lyons, Jr., being first duly sworn on his oath, states:

1. My name is Martin J. Lyons, Jr. I work in the City of St. Louis, Missouri, and I am employed by AmerenUE as Vice President and Controller.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 35 pages and Schedules MJL-3 and MJL-4, 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.

Martin J. Lyons, Jr.

Subscribed and sworn to before me this 5th day of February, 2007.

Danielle R. Moskop
Notary Public

My commission expires: July 21, 2009

Danielle R. Moskop
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: July 21, 2009
Commission # 05745027