Exhibit No.:	
Issues:	Rate LTS Class Cost Of Service Fuel Adjustment Clause
Witness:	Donald Johnstone
Type of Exhibit:	Rebuttal Testimony
Sponsoring Party:	Noranda
Case Number:	ER-2007-0002
Date Testimony Prepared:	February 5, 2007

AmerenUE

Case No. ER-2007-0002

Prepared Rebuttal Testimony of

Donald Johnstone

On behalf of

Noranda Aluminum, Inc.

February, 2007

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 Donald Johnstone

State of Missouri)
) ss
County of Camden)

Donald Johnstone, of lawful age, on his oath states: that he has reviewed the attached written testimony in question and answer form, all to be presented in the above case, that the answers in the attached written testimony were given by him; that he has knowledge of the matters set forth in such answers; that such matters are true to the best of his knowledge, information and belief.

Donald Johnstone

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

Carolyn Neporadny
Notary Public

CAROLYN NEPORADNY
Notary Public - Notary Seal
STATE OF MISSOURI
Commissioned for Camden County
My Commission Expires: August 30, 2009
Commission Number 05452654

Before the
Missouri Public Service Commission

AmerenUE

Case No. ER-2007-0002

Prepared Rebuttal Testimony of Donald Johnstone

Q PLEASE STATE YOUR NAME AND ADDRESS.

A My name is Donald Johnstone and my address is 384 Black Hawk Drive, Lake Ozark, Missouri, 65049.

Q ARE YOU THE SAME DONALD JOHNSTONE THAT SUBMITTED DIRECT TESTIMONY IN THIS PROCEEDING?

A Yes. My qualifications and experience are set forth in Appendix A to my direct testimony.

Q WHAT ARE THE PURPOSES OF YOUR TESTIMONY?

A My purposes are to address several class cost-of-service study issues, the Ameren proposal to cap the residential increase and spread the cost to other classes and rate design issues pertaining to the FAC.

SUMMARY OF TESTIMONY

Q PLEASE SUMMARIZE YOUR TESTIMONY?

A My testimony may be summarized as follows:

- There is broad agreement among the parties in support of the class cost-of-service as an appropriate basis for rates. There are, however, multiple approaches to the studies and several stray markedly from the principle of "cost causation." I will focus on issues of particular interest to Noranda under the Large Transmission Service (LTS) rate schedule. Those issues are 1) the treatments given to off-system sales and 2) the fixed costs of production.

- Off-system sales provide a margin that is shared among customers. The Ameren and Staff studies treat the costs and revenues inconsistently in a manner that overstates the cost to serve Noranda by some $5 to $6 million. The inconsistency should be eliminated and the margin should be allocated on the production demand allocation factor.

- The fixed costs of electricity generation (investment and operating costs of the generating plants) are an important aspect of the class cost-of-service studies where I have found problems. The problem may be characterized as one which leads to an overstatement of costs for high load factor customers. While load factor has an important and largely undeniable impact on the average cost of production service for any customer, Staff and OPC have submitted studies that result in a bias against high load factor customers and that would be detrimental to economic development efforts for such customers.

- Although there are multiple proposals for the spread of any increase or decrease, every class cost-of-service study submitted, without exception, shows that Rate LTS is too high in comparison to Rate LPS.

The need for change comes in part from the elimination of the "Contribution Factor" that is a part of the current LTS rate. Further, the revenues being provided by Noranda exceed the cost of the service provided and a downward adjustment is in order.

- Several aspects of the Ameren proposal for a Fuel Adjustment Clause ("FAC") require attention. I am advised that under the law all relevant factors must be considered by the Commission and among those factors must be the potential negative impacts on customers of the uncapped and unmitigated rate changes under the Ameren proposal. A particular Noranda concern is the possibility for sharp or extraordinary rate increases due to operation of the proposed FAC. I recommend a change from quarterly recovery periods to 12-month recovery periods to mute and smooth the retail rate impacts. I also recommend the addition of a 4% cap for FAC rate increases with a one year delay before the collection of the amounts above the cap (with interest at the statutory rate). If a mechanism is otherwise approved, these changes will provide for the mitigation of sharp or extraordinary retail rate impacts while providing for any approved level of FAC cost recovery.

- Noranda's second FAC concern is the rate design. Ameren proposes a mechanism to flow through the margin created by off-system sales. As stated in my direct testimony, the same method for the allocation of off-system sales margins should be used in the FAC and the class cost-of-service study used to design base rates. The allocation should be that used for demand-related production cost. This will require an additional rate element for the FAC in order to accurately pass through demand related FAC charges and credits.

CLASS COST-OF-SERVICE STUDY
RESULTS VS. NORANDA CONTRIBUTION FACTOR

Q WHAT IS THE COST TO SERVE NORANDA?

A It is difficult to pin down the number for a number of reasons, but it is less than the current LTS rate. Inasmuch as the present rate LTS includes a "Contribution Factor" that, by definition, increased the prices above a cost based level, this is not surprising.

Q WHAT IS THE HISTORY OF THE CONTRIBUTION FACTOR UNDER RATE LTS?

A Noranda receives no distribution service under rate LTS and the rate was initially established by removing an estimate of the distribution costs contained in the large primary service rate. As the name implies, service to customers under the large primary service rate includes a "distribution service" and delivery at primary distribution voltage. However, the large transmission service rate provides service at the transmission level and therefore excludes the "distribution service" that is part of the large primary service rate. This explains the removal of the costs on an estimated basis from the initial rate LTS. However, as an interim measure pending a rate case and a class cost-of-service study rate LTS was to be priced at a level equal to LPS. The purpose of the Contribution Factor was to establish and maintain that price parity for the interim period. Thus, by definition, the Contribution Factor has been providing revenue in excess of the cost of service.

In effect, the Contribution Factor was a negotiated price provision designed to set the price at $32.50 per MWh for an interim period. Since charges under the rate would have otherwise averaged closer to $30 per MWh, the contribution factor provides an annual payment to bring the average rate up to the agreed $32.50. The price difference is equal to Ameren's estimate of the cost of the distribution facilities. The $32.50 price was reviewed and approved by the Commission in EA-2005-0180.

The need for the Contribution Factor will come to an end in this proceeding with the establishment of cost-based prices for rate LTS. With the filing of this rate case there is now a class cost-of-service study on which the rate may be properly based to reflect the cost of service.

Q WHAT IS THE AMEREN PROPOSAL FOR RATE LTS?

A Ameren proposes to eliminate the Contribution Factor and to adjust the rate to cost according to its class cost-of-service study, except for the Noranda share of the Ameren proposal for the residential impact adjustment defended by Mr. Hanser. In effect, Ameren proposes a cost-based rate but for the residential subsidy it has proposed be paid by Noranda and others.

Q WHAT ARE THE IMPLICATIONS OF ELIMINATING THE CONTRIBUTION FACTOR?

A The contribution factor represents $9 million in annual revenue. The fact that it was a contribution in excess of cost has been confirmed by the cost studies.

All else being equal, and absent any change in the overall revenue requirement, the revenues provided by Noranda under rate LTS should go down by not less than $9 million, which is a 6.6% reduction.

Q BEFORE GETTING INTO ANY NECESSARY ADJUSTMENTS TO THE CLASS COST-OF-SERVICE STUDIES, DO ALL OF THE COSTS STUDIES, AS FILED, SHOW THAT THERE SHOULD BE A RATE REDUCTION FOR RATE LTS RELATIVE TO RATE LPS?

A Yes. The amount of the relative difference ranges from 7% to 25%. The numbers under the studies follow.

Table 1. Percent Change To Reach A Cost-Based Rate
Studies as Filed

Line	Party	Difference	LPS Rate	LTS Rate	Reference
1	AmerenUE	-21.7%	28.6%	6.9%	WLC-E7
2	MIEC-1	-23.3%	-3.1%	-26.6%	MEB-COS-4
3	MIEC-2	-20.9%	+1.0%	-19.9%	MEB-COS-5
4	MIEC-3	-25.3%	-5.5%	-30.8%	MEB-COS-6
5	OPC 1	-15.8%	17.6%	1.8%	DIR BAM-2.1
6	Staff Case 2	-6.8%	20.0%	13.2%	DCR-3-2
7	Staff Case 3	-10.9%	1.0%	-9.9%	DCR-3-3

These studies all confirm the fact that current rate LTS revenues, which include the effect of the contribution factor, are too high relative to rate LPS. This was a forgone and unavoidable result due to operation of the Contribution

Factor. There is now abundant and overwhelming evidence that rate LTS needs to have the Contribution Factor and related revenues removed to provide a nondiscriminatory rate as compared to rate LPS. The annual contribution factor produces $9 million of revenue, which in itself leads to a 6.6% rate reduction. I believe the unavoidable conclusions are: 1) regardless of any overall rate increase or rate decrease for Ameren, the Contribution Factor and revenues should be removed from rate LTS, and 2) relative to Rate LPS, an additional relative rate reduction substantially beyond the 6.6% of the contribution factor is appropriate.

Q GIVEN THE RANGE OF THE RESULTS, CAN ALL OF THE CLASS COST-OF-SERVICE STUDY RESULTS SET FORTH IN TABLE 1 BE CORRECT?

A No. One situation creating the differences among the studies is the difference in the jurisdictional costs (the revenue requirement) on which each are based. The Ameren study reflects the jurisdictional costs according to the Ameren's filing (a $360 million increase) while Staff provided studies based on the jurisdictional costs according to the Ameren filing and according to Staff's direct testimony on revenue requirements (a rate decrease). The MIEC studies are based on a third level of jurisdictional costs.

Q ARE THERE ALSO DIFFERENCES AMONG THE STUDIES DUE TO DIFFERING COST ALLOCATION METHODS?

A Yes, there are important differences in the degree to which the methods in the studies reasonably capture the concept of cost causation. Nevertheless, and understanding that I cannot agree with or support several of the approaches, it is noteworthy that in every case the direction is consistent for reduction in rate LTS relative to rate LPS.

CLASS COST-OF-SERVICE

INCONSISTENT ALLOCATIONS FOR OFF-SYSTEM SALES

Q WHAT ARE THE ISSUES RELATED TO THE ALLOCATION OF THE COSTS AND REVENUES OF OFF-SYSTEM SALES?

A There are three issues. The first is the magnitude of the costs and margins. The second is the method for the allocation of the margin among the customers. And the third is what I see as an undeniable need for consistency in the allocation of the costs, and the revenues that recover the costs. I will address the second and third issues and leave the magnitude to be addressed by others.

Q PLEASE EXPLAIN WHAT YOU MEAN BY "AN UNDENIABLE NEED FOR CONSISTENCY" IN THE ALLOCATION OF THE OFF-SYSTEM SALES COSTS AND THE REVENUES THAT RECOVER THOSE COSTS.

A If there is no consistency, some classes will receive benefits at the expense of others for no reason. Let me illustrate the point. As first noted in my direct

testimony, Ameren allocated the costs of off-system sales on energy and allocated the revenue from off-system sales on demand. This has led to a problem.

For illustration (and without intending to suggest agreement with the amounts) I will use the Ameren off-system sales figures from the update filing. The figures are $134 million for the costs of off-system sales and $317 million for the revenue. This produces a margin of revenue above cost of $183 million. Of course the first thing you have to do with the off-system sales revenue is to recover the cost of sales. This means that $134 million of the revenues are merely recovering the cost of generating or purchasing the energy being sold. The remainder of the revenue, $183 million, is termed the margin. The margin is simply the amount of revenue in excess of the cost of the sales and could be thought of as the profit on the off-system sales transactions. The margin represents a benefit to be shared among the ratepayers inasmuch as it is the ratepayers that are paying for the facilities that make the sales possible.

Instead of focusing on the margin, the benefit to be shared among customers, Ameren in its class cost-of-service study first allocates the costs of the off-system sales among classes on the energy allocation factor and then allocates all of the revenue from the sales on the production demand allocation factor. However, as explained above, the first $134 million of revenue does nothing more than recover the cost of the energy that constitutes the sales. It follows that this portion of the revenue must be allocated on the same basis as

the cost. I see this need for consistency as undeniable. However, Ameren did not maintain the requisite consistency and the Ameren results therefore present a problem as follows:

Table 2. Illustration of Ameren's Inconsistent Allocation of Off-System Sales Costs and Revenues that Recover the Costs

Line	Rate Class	Costs	Revenues that Recover Costs	Benefit/(Cost)
1	Total	$134,000,000	$134,000,000	$0
2	Residential	$49,080,660	$62,408,514	$13,327,854
3	SGS	$13,219,121	$14,953,370	$1,734,250
4	LGS	$28,939,785	$26,294,799	($2,644,987)
5	SPS	$14,332,845	$11,481,628	($2,851,218)
6	LPS	$14,762,463	$11,117,406	($3,645,057)
7	**LTS - Noranda**	**$13,665,125**	**$7,744,283**	**($5,920,842)**

Ameren allocates $13.6 million of the $134 million in costs to Noranda, but only $7.7 million of the $134 million of the revenues that recover those costs. Thus, Noranda suffers to the extent of $5.9 million. If the costs are higher (as in the Staff case) the harm would be even greater.

Q DOES THE AMEREN ALLOCATION OF THE OFF-SYSTEM SALES MARGIN HAVE ANY EFFECT ON PROBLEM CREATED BY THE INCONSISTENCY?

A No. The $183 million in revenues that constitute the margin are spread among the classes with the production demand allocation factor. While this treatment

of the margin is appropriate, the harm created by the inconsistent allocation of the $134 million remains. As a consequence, the Ameren class cost-of-service study will understate the net benefit of off-system sales to Noranda by $5.9 million, plus the effect of any indirect allocations that may be effected. Said another way, the Noranda cost of service will be overstated by $5.9 million.

Q HOW CAN THE PROBLEM BE FIXED IN THE AMEREN CLASS COST-OF-SERVICE STUDY?

A What is needed for an accurate class cost-of-service study is the margin portion of the revenues. The cost of the off-system sales and the portion of revenues that merely recovers the cost is not needed. The fix is to include only the margin from off-system sales in the class cost-of-service study.

The margin on the off-system sales constitutes a benefit that should be allocated among the customer classes on the production demand allocation factor. I agree with this aspect of the Ameren class cost-of-service study.

Q PLEASE EXPLAIN WHY THE COSTS OF OFF-SYSTEM SALES AND THE PORTION OF REVENUES THAT RECOVER THOSE COSTS ARE NOT NEEDED FOR AN ACCURATE CLASS COST-OF-SERVICE STUDY.

A As explained earlier above, there must be consistency in the allocations for the costs of the off-system sales and the portion of revenues that recover those costs. Done properly, the portion of revenues that recover the cost and the

costs themselves will always cancel each other out. That means that there is no effect on the results of the study.

Since there is no effect on the study results, I recommend removal of the cost and the offsetting revenues that recover the cost from the class cost-of-service study. This will effectively ensure a result that attains the undeniable need for consistency.

Q PLEASE EXPLAIN WHY THE MARGIN ON OFF-SYSTEM SALES SHOULD BE SHARED AMONG CUSTOMER CLASSES ACCORDING TO THE PRODUCTION DEMAND ALLOCATION FACTOR

A The off-system sales margin derives from use of the production facilities. Therefore, the customers should benefit in same proportion as their responsibility for the cost of the production facilities.

Q DOES THE CLASS COST-OF-SERVICE STUDY PREPARED BY THE STAFF HAVE THE PROBLEM OF INCONSISTENCY IN THE TREATMENT OF OFF-SYSTEM SALES COST AND REVENUES?

A Yes. Staff uses different allocation factors, but nevertheless there is an analogous inconsistency between the treatment of the costs and revenues. The adverse effect of the Staff method is an inappropriate $5.5 million cost shift to Noranda that should be corrected. The same solution is needed. The costs of off-system sales and revenues that recover those costs should be removed from

the Staff class cost-of-service study. And the margin could be allocated on the production demand allocation factor as I recommend for the Ameren study. However, in the context of the Staff study the margin could also be reasonably allocated on an energy basis due to the heavy weight given to energy in allocation of the demand-related production costs.

CLASS COST-OF-SERVICE
RESULTS OF A PROPER STUDY

Q GOING TO NORANDA'S COST, WHY IS IT DIFFICULT TO PIN DOWN THE COST TO SERVE NORANDA?

A As explained above, at this time there continues to be a wide disparity among the parties in the alleged total revenue requirement. As a consequence, the jurisdictional cost inputs to the class cost-of-service studies vary widely. This circumstance makes it impossible to determine a specific cost for Noranda that is consistent with the jurisdictional cost of service absent a rate decision by the Commission. Even if I were asked to determine the jurisdictional cost of service, which I was not, the decision would remain with the Commission. I am aware of no substitute.

The extraordinary spread of $500 million among the parties is a consideration that has to be dealt with. Among the sources of the $500 million spread are issues such as the margin of off-system sales, which will impact Noranda disproportionately because production costs are such a large

percentage of the cost to serve Noranda. This means, that simple percentage approaches that would adjust the results of any particular class cost-of-service study up or down might produce very misleading results. I therefore advise against the use of that approach in these circumstances.

Q WHAT CLASS COST-OF-SERVICE STUDY INFORMATION CAN YOU PROVIDE?

A I have reviewed the Ameren class cost-of-service study and made the necessary adjustments related to off-system sales. A summary is located in the attached Schedule 1. The study is based on jurisdictional costs that reflect the $360 million increase sought by Ameren. The result is an increase of $3 million for Noranda, above the present Noranda revenue of $137 million.

I also completed an additional study for which I retained the Ameren cost allocation methods, but I changed the inputs to the jurisdictional costs supported by the Staff. Under this set of jurisdictional costs the result is a rate decrease of $36 million. A summary of the results is located in Schedule 2.

Staff also submitted a class cost-of-service study. The Staff study reflects the Staff position on jurisdictional costs (a rate decrease) and a substantially different approach to the allocation of costs. Generally speaking I cannot support the Staff study as one which is not equitable to large high load factor customers. Nevertheless, for the purpose of illustration I adjusted the

study to at least remove the inconsistency in the treatment of off-system sales(the off-system sales inconsistency was described above). The Staff study so adjusted shows a $12 million rate decrease for Noranda.

SPREAD OF THE INCREASE
IMPACT MITIGATION AND THE PROPOSAL FOR A RESIDENTIAL SUBSIDY

Q DO YOU OPPOSE LIMITS FOR THE RESIDENTIAL INCREASE AS PROPOSED BY AMEREN?

A I have reviewed the testimony of Mr. Hanser and find the basis for the proposed cap at the 10% level to be dubious. The proposal is not justified by the purported distinctions. Other customers share in the Ameren rate history and all customers must function within the same economy. In one sense the circumstances are similar for all, but there are factors that will vary among rate schedules and from customer to customer. For example there are competitive pressures for many industrial consumers. Another important perspective is that of economic development. Growth in sectors that produce jobs is important to the State of Missouri and any artificially imposed cost shift and attendant rate increase would operate to contradict economic development efforts. It would make it more difficult to attract new business and more difficult to retain existing business, both of which are important to the State of Missouri. In this context I see no justification for a residential preference funded by the other customer classes.

Q DOES MR. HANSER BELIEVE THAT ANY HIGHER LEVEL OF INCREASE IN RESIDENTIAL RATES WOULD NECESSARILY BE UNREASONABLE?

A No. He has so stated in a response to a data request. Thus, it appears to me that the residential cap is simply a discretionary proposal of the Ameren management for which Mr. Hanser has offered a rationalization.

Q ARE YOU OPPOSED TO A LIMIT ON THE SIZE OF THE INCREASE FOR RESIDENTIAL CUSTOMERS?

A Before answering I will distinguish between the cap and what is done to fund the cap. With that separation in mind and addressing the cap first, I agree that rate caps are useful in appropriate circumstances because the impact of rates on consumers is important. But I do not support or oppose the proposed cap on its merits.

Q ARE YOU OPPOSED TO THE FUNDING METHOD PROPOSED BY AMEREN IN CONJUNCTION WITH THE RATE CAP FOR RESIDENTIAL CUSTOMERS?

A Yes. The method of funding for the cap is important. The rate cap should not be funded by charging the cost of the cap to other customers. This transfer of costs between and among customers would lead to unreasonable and undue discrimination in favor of some customers at the expense of others.

Consequently, if there is a need or even just a desire to provide the residential cap, then Ameren should find another way to accomplish or fund

the cap. One possibility could be a phase-in plan funded by the beneficiaries (the residential class).

Q ARE THE ECONOMIC DEVELOPMENT CONCERNS YOU MENTIONED IMPORTANT IN THE CONTEXT OF ELECTRIC RATES FOR BUSINESS CUSTOMERS?

A Yes. It is always important to provide the lowest reasonable rates to facilitate the ability of the State to attract new business and to retain existing business. Hence, I continue to recommend rates based on the cost of service as both equitable among customers and important to the State as a whole.

Q ARE THERE ANY CONCERNS WITH THE CLASS COST-OF-SERVICE STUDIES OF STAFF OR OPC IN THIS REGARD?

A Generally speaking, these studies in my opinion stray significantly from the principles of cost causation and one result is higher rates for large high load factor consumers. An important problem arises in the area of production capacity. Whenever there are large fixed costs, as there are in electricity production, the average cost is necessarily higher for any low load factor (inconsistent) usage of the production facility as compared to the average cost with an average or above average load factor. On the other hand, if the facility can be used at full capacity consistently (a very high load factor) the average cost will necessarily be the lowest possible.

Staff and OPC have proposed allocation methods that have the effect of

shifting some of the costs associated with an inconsistent low load factor use of production facilities to the customers with high load factors. This approach, if adopted, would be harmful to the high load factor users and harmful to the economic development efforts of the State of Missouri. Therefore, the cost-based approach to the allocation of production costs as explained by Ameren should be adopted by the Commission.

Q IN THE CONTEXT OF THIS REBUTTAL TESTIMONY, DO YOU HAVE A RECOMMENDATION FOR THE SPREAD OF ANY INCREASE OR DECREASE APPROVED IN THIS PROCEEDING?

A I continue to recommend a rate for Noranda based on the cost of service. In particular, I recommend a rate for Noranda based on a class cost-of-service study that incorporates the Ameren methods with clarification of the off-system sales margin to remove the inconsistency. The study should be rerun to incorporate the approved level of revenue requirements. Several parties have the ability to perform this study once the costs are settled by agreement or decided by the Commission. Noranda would certainly be willing to run the study in due course. In the context of such a large variation in revenue requirements among the parties, some $500 million, this is an approach that can assuredly produce an equitable cost-based result.

FUEL ADJUSTMENT CLAUSE
IMPACT MITIGATION

Q HAVE YOU REVIEWED THE FAC PROPOSED BY AMEREN?

A I have, and I find a problem in that there are no provisions to limit sharp or extraordinary rate increases. I am also concerned with the rate design treatment of the off-system sales margins, if they are included in the FAC. Silence on other aspects of the FAC should not be construed as support as I have been asked to investigate only these particular issues.

Q WHY ARE YOU CONCERNED BY THE LACK OF PROVISIONS TO LIMIT RATE INCREASES UNDER THE PROPOSED FAC?

A The impact of rate changes is always a concern when rates go up. As explained in my direct testimony, sharp or extraordinary increases can present problems for customers. The fact that the FAC operates in an automatic fashion heightens the concern.

Q ARE THERE ANY ASPECTS OF THE AMEREN PROPOSAL THAT INCREASE THE LIKELIHOOD OF SHARP OR EXTRAORDINARY RATE INCREASES?

A Yes. Ameren proposes to accumulate variations in costs in three-month Accumulation Periods and to recover the variations in subsequent three-month Recovery Periods. This makes the mechanism subject to substantial increases from one quarter to the next. For example a particular summer period may be

characterized by high costs which, under the Ameren proposal would be collected the following winter. The winter may swing the other way such that the following summer rate would enjoy a substantial reduction. The reduction would seem to be good news, but it could be short lived and there could easily be another substantial increase at such time as the three-month recovery period for the low costs expired. In effect the retail rates would exposed to an unpredictable roller coaster. Hence, I conclude that the Ameren proposal creates unnecessary exposure to rate volatility and is therefore unwise.

Q IS IT POSSIBLE TO REMEDY THE EXPOSURE TO ROLLER COASTER RATES IN THE CONTEXT OF THE AMEREN PROPOSAL?

A Yes. If a FAC is approved, it ought to provide for the mitigation of any sharp or extraordinary rate increases. I recommend two remedies that offer a more consumer friendly approach. First, the recovery period associated with each accumulation period should be extended from the three-month proposal to twelve months. Second, there should be a percentage cap on any FAC rate increase. Cost amounts in excess of the cap should be deferred for 12 months and collected in the next consecutive 12-month period with accrued interest, subject to any prudence review that may occur in the meantime.

Q TURNING TO YOUR FIRST RECOMMENDED REMEDY, WHAT ARE THE BENEFITS OF EXTENDING THE RECOVERY PERIOD FROM THE THREE MONTH PROPOSAL OF AMEREN TO TWELVE MONTHS?

A The cost variations from any three-month accumulation period will be spread over 12 months and the immediate rate impact will therefore will be roughly one-fourth as large. Thus, the initial percentage rate impact of any extraordinary cost period will be reduced markedly. Also, during any 12-month Recovery Period there will at least be the possibility of mitigating changes if the extraordinary costs persisted for only one Accumulation Period. On the other hand, if the increase is a part of a persistent upward trend, there will still be the beneficial effect of an extended phase in to the new higher cost level.

Q DOES YOUR RECOMMENDATION FOR EXTENSION OF THE RECOVERY PERIODS TO TWELVE MONTHS (FOR EACH OF THE FOUR RECOVERY PERIODS) HARM AMEREN FINANCIALLY?

A I see no harm. Ameren would be made whole due to the inclusion of carrying costs and all intended cost recovery would continue to be provided.

FUEL ADJUSTMENT CLAUSE

RATE CAP

Q WILL THE IMPACT OF CHANGES IN FUEL COSTS UNDER A FAC VARY AMONG CUSTOMERS?

A Since fuel costs constitute a greater or lesser portion of a customer's bill, depending on the rate class, the impact will vary from rate to rate and from customer to customer. Because Noranda is a large high load factor customer taking transmission level service, fuel is a larger portion of the bill for Noranda than for any other customer. This makes Noranda very sensitive to changes in fuel costs and for that reason Noranda recommends a cap on the magnitude of rate changes under any FAC.

Q WHAT IS YOUR PROPOSAL FOR A CAP ON RATE INCREASES PURSUANT TO THE PROPOSED FAC?

A As a remedy to the exposure to sharp or extraordinary increases under the Ameren proposal I recommend a rate cap mechanism to limit the size of any rate increase pursuant to the operation of the FAC. As explained, fuel is a larger portion of the bill for Noranda than for any other customer. I therefore determined to use rate LTS as a way to measure and limit the size of any rate change under the FAC. With this approach other smaller customers will always have the benefit of a cap that will result in a smaller percentage impact for them than for Noranda.

I recommend a cap that will limit the increase to rate LTS to approximately 4 percent on an annual basis. The effect for the residential class would be a cap of 2.2%. The impact in dollars will vary somewhat depending on assumptions and loss factors, but the increase would amount to approximately $.0013 per kWh by the fourth quarter if the FAC rate changes hit the cap in each of four consecutive quarters. I recommend a measurement for the cap based on a 1 percent increase in Rate LTS for each quarter, excluding the effect of any changes in base rates. For simplicity of administration, I recommend the calculations be based on an assumed 100% load factor.

If an increase in fuel costs would otherwise result in an excessive increase, the increase would be limited by the cap through a reduction in the FAC recovery factor to the level permitted by the cap. The recovery factor so determined would be applied to all customers, adjusted to give effect to the appropriate loss factors.

Q WHAT HAPPENS TO THE COSTS IN EXCESS OF THE CAP?

A They will be collected in the next following twelve month period, with interest. During the intervening 12 month period it may well be possible to complete a prudence review so that in the event of any large increase, the amount could be reviewed to establish prudence, or lack thereof, prior to passing the full amount to consumers. This seems to me to facilitate the intent that only prudently incurred costs be recovered pursuant to any FAC.

Q WHAT IS THE BASIS FOR YOUR RECOMMENDATION OF 4% AS THE LEVEL OF THE FAC RATE CAP?

A The recommendation is largely a matter of judgment. There is the possibility of up to a 2.5% increase under any environmental rider that may be proposed in the future and there is also the possibility of an increase due to a change in base rates. The cap as I have defined it would not consider base rate changes so the combined effect would not be limited and, unfortunately, could be substantially more than 4%. If an environmental rider is approved at any point during the period of the RAM my recommendation is to revisit the FAC rate cap at that time.

Q HOW MUCH COULD FUEL COSTS CHANGE WITHOUT VIOLATING THE CAP?

A I estimate the increase could be 38% in one year and 100% in three years. For my estimates I assumed an increase equal to the recommended cap in each quarter. I conclude that a very substantial increase could be accommodated over time while limiting the possibility of any sharp or extraordinary increase in any one quarter.

Q HOW CAN THE INCREASE IN FUEL COSTS BE GREATER THAN THE INCREASE IN RATES?

A This is possible for two reasons. First, I recommended extension of the FAC Recovery Period from three months to twelve months. This, on average, would

provide for a retail rate change per kWh that would be only one fourth of the quarterly change in fuel costs per kWh. The second consideration is the simple fact that fuel costs represent less than half of the retail rate. The combination of the design changes I recommend and this fact make it possible to control the magnitude of retail rate impacts while still providing for the pass through of substantial changes in fuel costs, assuming that is the choice of the Commission.

Q DOES YOUR RECOMMENDATION FOR A RATE CAP HARM AMEREN FINANCIALLY?

A Again, I see no harm. Ameren would be made whole due to the inclusion of carrying costs and all intended recovery of prudently incurred costs would continue to be provided.

Q HAVE YOU PREPARED AN EXAMPLE OF THE IMPACT OF YOUR RATE CAP RECOMMENDATION?

A Yes. The example is set forth on Schedule 4. For the illustration I assumed the current class revenue and kWh according to the Ameren filing.

FUEL ADJUSTMENT CLAUSE

RATE DESIGN FOR OFF-SYSTEM SALES

Q DOES THE ALLOCATION OF OFF-SYSTEM SALES HAVE ANY IMPACT ON THE FAC PROPOSED BY AMEREN?

A The answer is "yes" if the margin on off-system sales is included in the FAC (as proposed by Ameren) and "no" if the margin on off-system sales is excluded. If yes, the impact will be significant. As proposed the FAC deals only with energy-related costs in all other respects, and as a result, the only rate design necessity is to include an appropriate loss-adjusted energy rate for each rate class and voltage level of service. However, since the off-system sales margin is properly allocated on a demand basis, a degree of difficulty is infused into the FAC process. As illustrated elsewhere in this testimony, the difference between an energy allocation and a demand allocation will amount to millions of dollars for Noranda. As the off-system sales margins change through time, Noranda will either receive a windfall, or be overcharged, if the proper allocation is not maintained. The equitable solution is to provide for the correct allocation of the off-system sales benefits in both base rates and in the FAC.

Q HAVE YOU DRAFTED TARIFF LANGUAGE TO IMPLEMENT THE ABOVE RECOMMENDED CHANGES TO AMEREN'S FAC PROPOSAL?

A Yes. Language appropriate for the tariff is attached as Schedule DEJ 5.

Q DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

A Yes.

AmerenUE Class Cost of Service Study
AmerenUE Jurisdictional Cost of Service ($000's)
AmerenUE Allocators
Off-System Sales Margin Only
Rate of Return 8.869%

Line		Missouri	Residential	Small General Svc	Large General Svc	Small Primary Svc	Large Primary Svc	Large Transmission
1	Base Revenue	$ 2,331,477	$ 1,088,277	$ 253,096	$ 447,994	$ 199,293	$ 196,456	$ 140,713
2	Other Revenue	62,831	32,743	6,417	10,700	4,656	4,991	3,324
3	Lighting Revenue	27,111	13,515	3,093	5,129	2,117	2,024	1,231
4	OSS Margin	180,000	83,443	20,139	35,494	15,423	14,939	10,562
5	Rate Variance	(22)	(11)	(2)	(4)	(2)	(2)	(1)
6	Total Operating Revenue	$ 2,599,398	$ 1,216,224	$ 282,641	$ 499,281	$ 221,471	$ 218,305	$ 155,830
7	Total Prod, T&D, Customer, & A&G Expenses	$ 1,335,770	$ 583,633	$ 138,446	$ 262,420	$ 124,637	$ 125,971	$ 100,662
8	Total Depreciation and Ammortization Expenses	386,941	197,618	44,796	72,330	28,930	27,432	15,834
9	Real Estate and Property Taxes	99,528	50,795	11,520	18,610	7,447	7,065	4,092
10	Income Taxes	233,191	116,251	26,604	44,120	18,212	17,410	10,592
11	Payroll Taxes	19,601	9,331	2,093	3,657	1,732	1,700	1,087
12	Federal Excise Tax	-	-	-	-	-	-	-
13	Revenue Taxes	-	-	-	-	-	-	-
14	Total Operating Expenses	$ 2,075,031	$ 957,629	$ 223,461	$ 401,138	$ 180,958	$ 179,577	$ 132,268
15	Net Operating Income	$ 524,368	$ 258,595	$ 59,180	$ 98,143	$ 40,512	$ 38,727	$ 23,562
16	Gross Plant in Service	$ 11,224,426	$ 5,727,483	$ 1,298,968	$ 2,098,760	$ 840,189	$ 797,165	$ 461,861
17	Reserves for Depreciation	(4,500,562)	(2,336,943)	(524,193)	(834,584)	(324,668)	(306,876)	(173,298)
18	Net Plant in Service	$ 6,723,865	$ 3,390,540	$ 774,776	$ 1,264,176	$ 515,521	$ 490,289	$ 288,563
19	Materials & Supplies - Fuel	$ 227,226	$ 83,227	$ 22,416	$ 49,074	$ 24,304	$ 25,033	$ 23,172
20	Materials & Supplies - Local	21,434	13,180	2,694	3,557	1,060	914	29
21	Cash Working Capital	(13,595)	(5,854)	(1,403)	(2,695)	(1,285)	(1,301)	(1,057)
22	Prepayments	-	-	-	-	-	-	-
23	Customer Advances & Deposits	(14,677)	(6,243)	(4,406)	(2,673)	(845)	(511)	-
24	Tax Offsets & Emission Credits	-	-	-	-	-	-	-
25	Accumulated Deferred Income Taxes	(1,095,577)	(559,136)	(126,813)	(204,854)	(81,970)	(77,764)	(45,040)
26	Total Net Original Cost Rate Base	$ 5,848,677	$ 2,915,713	$ 667,264	$ 1,106,586	$ 456,786	$ 436,660	$ 265,668
27	Rate of Return	8.966%	8.869%	8.869%	8.869%	8.869%	8.869%	8.869%

Schedule DEJ 1

Schedule DEJ 1

AmerenUE Class Cost of Service Study
Staff Jurisdictional Cost of Service ($000's)
AmerenUE Allocators
Off-System Sales Margin Only
Rate of Return 7.439%

		Missouri	Residential	Small General Svc	Large General Svc	Small Primary Svc	Large Primary Svc	Large Transmission
1	Base Revenue	$ 1,846,733	$ 890,755	$ 203,590	$ 349,362	$ 152,891	$ 149,397	$ 100,766
2	Other Revenue	61,964	32,289	6,328	10,552	4,593	4,923	3,278
3	Lighting Revenue	27,198	13,559	3,103	5,146	2,124	2,031	1,235
4	OSS Margin (AF1)	315,446	146,914	35,201	61,900	27,029	26,171	18,231
5	Rate Variance	-	-	-	-	-	-	-
6	Total Operating Revenue	$ 2,251,341	$ 1,083,517	$ 248,222	$ 426,960	$ 186,637	$ 182,523	$ 123,510
7	Total Prod, T&D, Customer, & A&G Expenses	$ 1,266,858	$ 582,903	$ 134,933	$ 242,833	$ 112,085	$ 111,648	$ 82,480
8	Total Depreciation and Ammortization Expenses	289,612	152,861	33,983	53,114	20,464	19,210	9,980
9	Real Estate and Property Taxes	91,154	46,521	10,551	17,044	6,820	6,470	3,747
10	Income Taxes	198,903	99,158	22,692	37,633	15,534	14,850	9,035
11	Payroll Taxes	23,281	11,082	2,486	4,343	2,059	2,021	1,292
12	Federal Excise Tax	-	-	-	-	-	-	-
13	Revenue Taxes	-	-	-	-	-	-	-
14	Total Operating Expenses	$ 1,869,808	$ 892,526	$ 204,645	$ 354,968	$ 156,963	$ 154,199	$ 106,535
15	Net Operating Income	$ 381,533	$ 190,991	$ 43,577	$ 71,991	$ 29,675	$ 28,323	$ 16,976
16	Gross Plant in Service	$ 10,652,327	$ 5,454,820	$ 1,234,603	$ 1,987,881	$ 792,646	$ 751,305	$ 431,072
17	Reserves for Depreciation	(4,476,468)	(2,336,292)	(522,943)	(828,382)	(319,513)	(301,412)	(167,925)
18	Net Plant in Service	$ 6,175,859	$ 3,118,527	$ 711,661	$ 1,159,499	$ 473,133	$ 449,893	$ 263,147
19	Materials & Supplies - Fuel	$ 129,507	$ 47,435	$ 12,776	$ 27,969	$ 13,852	$ 14,267	$ 13,207
20	Materials & Supplies - Local	108,154	53,562	12,379	20,582	8,480	8,101	5,050
21	Cash Working Capital	(36,010)	(15,506)	(3,716)	(7,137)	(3,404)	(3,447)	(2,799)
22	Prepayments	6,752	4,151	849	1,121	334	288	9
23	Customer Advances & Deposits	(14,951)	(6,359)	(4,488)	(2,723)	(861)	(520)	-
24	Tax Offsets & Emission Credits	(25,687)	(12,241)	(2,864)	(4,856)	(2,257)	(2,188)	(1,282)
25	Accumulated Deferred Income Taxes	(1,214,809)	(622,137)	(140,811)	(226,701)	(90,371)	(85,653)	(49,135)
26	Total Net Original Cost Rate Base	$ 5,128,815	$ 2,567,433	$ 585,785	$ 967,754	$ 398,906	$ 380,741	$ 228,197
27	Rate of Return	7.439%	7.439%	7.439%	7.439%	7.439%	7.439%	7.439%

Schedule DEJ 2

AmerenUE Class Cost of Service Study
Staff Jurisdictional Cost of Service ($000's)
Staff Allocators
Off-System Sales Margin Only
Rate of Return 7.439%

Line	Functional Category	Missouri	Residential	Small General Svc	Large General Svc	Small Primary Svc	Large Primary Svc	Large Transmission
1	Production - Capacity	$ 831,495	$ 334,862	$ 87,915	$ 174,842	$ 82,304	$ 81,765	$ 69,808
2	Production - Energy	433,116	158,639	42,727	93,540	46,327	47,715	44,169
3	Transmission - Capacity	66,940	26,958	7,078	14,076	6,626	6,583	5,620
4	Distribution - Substations	4,473	2,365	615	897	353	243	-
5	Substations	40,994	20,973	4,802	8,440	3,525	3,254	-
6	Distribution - OH/UG	$ 24,545	$ 14,971	$ 3,892	$ 5,682	$ -	$ -	$ -
7	Distribution - OH/UG	31,876	27,833	3,765	259	18	2	-
8	Distribution - OH/UG	86,496	45,734	11,888	17,356	6,817	4,700	-
9	Distribution - Transformers	$ 12,943	$ 11,309	$ 1,530	$ 105	$ -	$ -	$ -
10	Distribution - Transformers	1,631	1,106	244	281	-	-	-
11	Distribution - Operations	24,200	12,078	3,560	3,432	2,677	2,398	55
12	Distribution - Maintenance	4,756	2,842	643	792	274	193	12
13	Distribution - Services	-	-	-	-	-	-	-
14	Distribution - Meters	9,264	6,315	2,015	564	279	86	5
15	Distribution - Direct Assignments	1,333	(571)	-	-	952	952	-
16	Customer Deposits	(933)	(397)	(280)	(170)	(54)	(32)	-
17	Meter Reading	17,056	14,808	2,003	221	20	4	-
18	Billing, Sales, Service	19,893	17,070	1,223	615	165	820	-
19	A & G	$ 347,078	$ 147,916	$ 36,540	$ 69,387	$ 33,035	$ 32,967	$ 27,233
20	Customer Records	21,903	17,095	1,888	2,690	211	19	1
21	Depreciation, Taxes, CWC	$ 263,058	$ 143,361	$ 31,520	$ 47,302	$ 17,379	$ 16,002	$ 7,494
22	Total	$ 2,242,118	$ 1,005,269	$ 243,568	$ 440,310	$ 200,907	$ 197,669	$ 154,396
23	Allocate Cost of Service for Others	-	-	-	-	-	-	-
24	Total Cost of Service	$ 2,242,118	$ 1,005,269	$ 243,568	$ 440,310	$ 200,907	$ 197,669	$ 154,396
25	%	100.00%	44.84%	10.86%	19.64%	8.96%	8.82%	6.89%
26	Rate Revenue	$ 2,040,379	$ 883,573	$ 239,245	$ 437,789	$ 185,248	$ 158,871	$ 135,652
27	Allocate Revenue for Others	27,194	13,852	3,133	5,079	2,039	1,941	1,150
28	Other Revenue	$ 61,964	$ 32,291	$ 6,328	$ 10,552	$ 4,592	$ 4,922	$ 3,278
29	System and Interchange Sales	$ 315,446	$ 127,037	$ 33,352	$ 66,330	$ 31,224	$ 31,019	$ 26,483
30	Total Revenue	$ 2,444,982	$ 1,056,753	$ 282,059	$ 519,750	$ 223,102	$ 196,754	$ 166,564
31	%	100%	43.22%	11.54%	21.26%	9.12%	8.05%	6.81%
32	Revenue Deficiency	$ (202,864)	$ (51,484)	$ (38,492)	$ (79,440)	$ (22,196)	$ 916	$ (12,168)
33	% Change	-9.94%	-5.83%	-16.09%	-18.15%	-11.98%	0.58%	-8.97%

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Example of Recommended Rate Cap for Rider A

Assuming Three Month Accumulation Periods
and Twelve Month Recovery Periods
($ amounts per kWh)

Line	Effective Date of Rate Change	2007	3/1/2008	6/1/2008	9/1/2008	12/1/2008	3/1/2009	6/1/2009	9/1/2009	12/1/2009	3/1/2010	6/1/2010	9/1/2010	12/1/2010
1	Consecutive 3 month Period #	0	1	2	3	4	5	6	7	8	9	10	11	12
2	**Retail Cap**		**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**	**1.00%**
	Fuel Cost Changes													
3	Base Fuel Cost	$ 0.0134												
4	Accumulation Period Increase in Fuel Cost		$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0013	$0.0014	$0.0014	$0.0014	$0.0014	$0.0014
5	Percent Increase Over Prior Quarter		9.6%	8.7%	8.1%	7.5%	7.1%	6.7%	6.3%	6.0%	5.7%	5.5%	5.2%	5.0%
6	Cumulative Increase in Fuel Cost		$0.00128	$0.00257	$0.00386	$0.00516	$0.00647	$0.00780	$0.00914	$0.01049	$0.01186	$0.01324	$0.01463	$0.01604
7	**Cumulative Percent Increase - Fuel Cost**		**9.6%**	**19.1%**	**28.8%**	**38.5%**	**48.3%**	**58.2%**	**68.2%**	**78.2%**	**88.4%**	**98.7%**	**109.1%**	**119.6%**
8	Total Fuel Cost		$0.0147	$0.0160	$0.0173	$0.0186	$0.0199	$0.0212	$0.0226	$0.0239	$0.0253	$0.0266	$0.0280	$0.0294
	Retail Rate Changes													
9	Rate LTS 100% Load Factor	$ 0.0325												
10	Increase Equal to Cap		$0.00033	$0.00033	$0.00033	$0.00033	$0.00033	$0.00034	$0.00034	$0.00034	$0.00035	$0.00035	$0.00035	$0.00036
11	Rate LTS with Increase Equal to Cap		$0.03283	$0.03315	$0.03348	$0.03381	$0.03414	$0.03448	$0.03482	$0.03516	$0.03551	$0.03586	$0.03621	$0.03657
12	Percent Increase Over Prior Quarter		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
13	Annual Average Rate	$ 0.0325				$ 0.0333				$ 0.0347				$ 0.0360
14	Increase in Annual Average Rate					$ 0.0008				$ 0.0013				$ 0.0014
15	Percent Increase					2.5%				4.0%				4.0%
16	**Impact on a Residential Customer**													
17	Increase equal to Cap		$0.00035	$0.00035	$0.00035	$0.00035	$0.00036	$0.00036	$0.00036	$0.00037	$0.00037	$0.00038	$0.00038	$0.00038
18	Residential with Increase Equal to Cap		$0.06497	$0.06532	$0.06567	$0.06602	$0.06638	$0.06674	$0.06711	$0.06747	$0.06785	$0.06822	$0.06860	$0.06898
19	Percent Increase Over Prior Quarter		0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.6%	0.6%	0.6%	0.6%
20	Annual Average Rate	$ 0.0646				$ 0.0655				$ 0.0669				$ 0.0684
21	Increase in Annual Average Rate					$ 0.0009				$ 0.0014				$ 0.0015
22	Residential Percent Increase					1.4%				2.2%				2.2%

Schedule DEJ 4

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FAC Change Recommendations

Recommended Extension of Recovery Periods from 3 Months to 12 Months

Ameren Proposal			Recommended Mitigation Measure
Accumulation Period	Filing Date	3 Month Recovery Periods	12 Month Recovery Periods
December through February	By April 1	June through August	June through May
March through May	By July 1	September through November	September through August
June through August	By October 1	December through February	December through November
September through November	By January 1	March through May	March through April

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FAC Change Recommendations

Recommended Additional Provisions for the Proposed Rider A to Spread the Margins from Off-System Sales Among Customer Classes with the Approved Production Demand Allocation Factor

SMA_C = [SMS + RSM + ISM] × DAF_C / S_C
TRA_C = FPA + SMA_C

SMA_C = Share of Margins Adjustment for each customer Class.
SMS = Share of Margins is the jurisdiction share of the margins from off-system sales. [include any provisions for sharing as approved for the RAM]
ISM = Interest on deferred share of margin amounts and share of margin under- or over-recovery balances. Interest shall be calculated monthly at a rate equal to the weighted average interest rate paid on the Company's short-term debt, applied to the month-end balance of deferred share of margin amounts and the under- or over-recovery balances.
RSM = Under/Over recovery balance from the Recovery Periods, and modifications due to adjustments ordered as a result of required prudence review, with interest as defined in item ISM.
DAF_C = Production demand allocation factor for each rate class as set forth below.
S_C = Applicable Recovery Period estimated kWh for each rate class.
TRA_C = Total Rate Adjustment. The sum of the Fuel and Purchased Power Adjustment and the

Demand Allocation Factor Table

Rate Class	Production Demand Allocation Factor
Residential	46.5735%
SGS	11.1592%
LGS	19.6230%
SPS	8.5684%
LPS	8.2966%
LTS	5.7793%
Total	100.0000%

AmerenUE
FAC Change Recommendations

Recommended Rate Cap Provisions

TRA_{LTS} and FPA shall be subject to limitation pursuant to this Rate Cap provision

The Rate Cap shall be 1%, provided that the percentage shall be subject to review and change by the Commission if an environmental rider is approved.

TRA_{LTS} shall be limited to an amount equal to the Rate Cap times the Historic Total Charge.

The Historic Total Charge shall be computed as the annual average cost per kWh under rate LTS assuming a 475 MW load, a 100% load factor, the current base period rate, and all Rider A charges and credits in effect each month of the twelve month period ending on date that the next recovery period charge is to become effective.

If TRA_{LTS} is limited due to the cap, the limitation shall be ascribed to the fuel and purchased power component as follows:

Capped FPA = Capped TRA_{LTS} - SMA_{LTS}

The Capped FPA shall be applicable for all customers subject to this rider. Costs excluded during a recovery period due to operation of the cap shall be recovered in the recovery period beginning 12 months later and shall include interest and prudence adjustments, if any.