Exhibit No.:
Issues: Rate LTS
Class Cost Of Service
Fuel Adjustment Clause
Witness: Donald Johnstone
Type of Exhibit: Direct Testimony
Sponsoring Party: Noranda
Case Number: ER-2007-0002
Date Testimony Prepared: December 29, 2007

AmerenUE

Case No. ER-2007-0002

Prepared Direct Testimony of

Donald Johnstone

On behalf of

Noranda Aluminum, Inc.

December 2006

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 14th day of December, 2006

Carolyn Neporadny
Notary Public

[SEAL]

My Commission expires:_____

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 Direct 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 BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A I am employed as President of Competitive Energy Dynamics, L. L. C.

Q PLEASE SUMMARIZE YOUR EDUCATION AND EXPERIENCE.

A My qualifications and experience are set forth in Appendix A.

Q WHAT ARE THE PURPOSES OF YOUR TESTIMONY?

A One purpose is to support the cost of service as the appropriate basis for charges to Noranda under the Large Transmission Service (LTS) rate schedule.

While all aspects of a class cost-of-service study are important, I will address in particular several of the more important aspects. I will also make recommendations for the design of rates in the event that a fuel adjustment clause is approved in this case.

Q WHAT SERVICE DOES AMERENUE PROVIDE TO NORANDA?

A The Noranda facility that receives service from AmerenUE is described in the testimony of Mr. George Swogger. Like Mr. Swogger, I will refer to the facility as the "Smelter." In addition Mr. McPheeters, Mr. Harvey Cooper, and Mr. Mark Baker, Commissioner of New Madrid County, explain some of the economic impacts of the Smelter. There are economic impacts in the local communities, in southeast Missouri, and for the State as a whole.

AmerenUE provides service to Noranda under the Large Transmission Service rate schedule. The service provided to the Smelter is firm and Noranda consumes approximately 475MW around the clock - seven days a week. A measure of Noranda's consistent use of the AmerenUE facilities is the ratio of the average use of electricity as compared to the peak use. In Noranda's case the comparison is captured in a load factor of 98%. This leads to the full use of the Ameren facilities and a lower average cost per kWh delivered to Noranda.

Q DO THE SIZE AND LOCATION OF THE SMELTER LOAD INFLUENCE THE FACILITIES THAT ARE USED TO PROVIDE THE SERVICE?

A Yes. As a consequence of the size of the load and the proximity of the Smelter to a transmission substation it is efficient for Noranda to receive its service at the transmission substation. Noranda owns and operates the distribution facilities that bring the electricity to the Smelter from the transmission substation. The only delivery equipment of any kind that is not owned and operated by Noranda is the metering. Another distinguishing feature of the service to Noranda is the delivery of the power over the transmission facilities of the Associated Electric Cooperative, Inc. Noranda separately pays Associated for this service. These several circumstances together make the Noranda load unique on the AmerenUE system and result in a cost per kWh for the Ameren service that is much lower than average. An appropriate rate will comprehend this lower than average cost.

Q WHAT IS AN APPROPRIATE BASIS FOR THE LARGE TRANSMISSION SERVICE (LTS) RATE UNDER WHICH NORANDA RECEIVES SERVICE?

A While factors such as understandability and ease of administration are appropriately considered, the rate should be set primarily based on the cost of the service provided. When a rate is based on cost, it is equitable in that each customer will pay the costs that are incurred by Ameren to provide the service that is consumed, no more and no less. As such, Noranda does not expect

other customers to pay costs incurred on its behalf and Noranda likewise does not expect to pay costs associated with service provided to other customers.

Q HOW SHOULD THE COST OF THE SERVICE BE DETERMINED FOR CUSTOMERS THAT RECEIVE SERVICE REGULATED BY THIS COMMISSION?

A In the context of regulated service the cost should be defined by a class cost-of-service study which will allocate the Ameren costs (as approved by the Commission) among customer classes based on the principle of cost causation.

Q WHAT IS THE COST TO SERVE NORANDA?

A A fundamental problem in the circumstances of this case is the wide disparity among the parties on the level of the AmerenUE total revenue requirement. Many of the large issues will substantially influence the result of any class cost-of-service study. In these circumstances it is impossible to determine a specific cost for Noranda at this time. Furthermore, an estimate at this time would require judgments and assumptions about the overall revenue requirement and I am not comfortable with that approach. Instead, I plan to review and respond to any class cost-of-service study that may be submitted to ensure that any proposals for the LTS rate are based on the cost of service, as I recommend.

Q ARE THERE ESTABLISHED PROCEDURES FOR CLASS COST-OF-SERVICE STUDIES?

A Yes. Ameren in the testimonies of Mr. Warwick and Mr. Cooper describe the process. Costs are "functionalized" according to the service function provided, "classified" as fixed or variable, and then "allocated" among the classes according the principle of cost causation. To the extent that I have reviewed it and on the information presently available, the Ameren class cost-of-service study uses a framework that is reasonable for the purpose.

Q WHAT ARE SOME OF THE IMPORTANT CLASS COST-OF-SERVICE ISSUES THAT MUST BE PROPERLY ADDRESSED IN THIS CASE AND THAT MAY BE CONTROVERSIAL?

A The issues, among others, include:

- The allocation of demand-related production costs
- The allocation of off-system sales costs and revenues
- The allocation of distribution costs.

While there are many important details in a class cost-of-service study, these issues are particularly important for Noranda because of the large impact each has on the Noranda cost of service.

Q WHY ARE THE ALLOCATIONS OF PRODUCTION COSTS IMPORTANT?

A Production costs are a large part of the costs of the system. In Noranda's situation, the absence of distribution costs means that production costs

constitute a relatively larger portion of the cost to serve Noranda.

Q IS THERE MORE THAN ONE WAY TO ALLOCATE PRODUCTION COSTS?

A Yes, there are many. But first both variable and fixed production costs must be defined.

The variable costs incurred to provide service to customers are energy related and are appropriately allocated among the classes according to the kWh of energy that must be generated to supply the energy for each customer class. The variable costs consist primarily of fuel for the generation needed to serve the load and the energy component of purchased power for the same purpose. As a consequence of the delivery to Noranda at a transmission substation, less energy is consumed in delivering the energy as compared to other retail customer classes where there is typically extensive use of the AmerenUE distribution system. Energy consumed in delivery is defined as energy "losses." These "losses" are low for Noranda because of the particular transmission service received and this fact must be properly reflected in the energy allocation factor.

The remaining (non-energy related) production costs are the fixed costs of ownership and operation of production facilities.[1] These costs are demand related and depend on the capacity needs of the system. In turn, it is primarily the contributions of customers to the peak loads of the system that create

[1] In the case of purchased power the fixed production costs may be reflected in a demand charge.

these costs. Demand related production costs should be allocated in proportion to the respective contributions of the customer classes to the peak loads. In the consideration of the load patterns on the AmerenUE system, the contributions of customers to the four highest monthly peaks would provide an appropriate measure of the contribution to demand related production costs.

Q WHY ARE THE ALLOCATIONS OF THE COSTS AND REVENUES OF OFF-SYSTEM SALES IMPORTANT TO NORANDA?

A The Staff has $533 million of off-system sales revenues in its case. This is roughly equal to 25% of the Missouri retail jurisdictional revenues. The allocation of a line item of this magnitude will have a large influence on the customer classes in any class cost-of-service study.

An important consideration is to align the allocations of the costs and revenues. In the case of the Large Transmission Service ("LTS") rate class (Noranda) the energy allocation factor proposed by Ameren is 10.20% while the proposed production demand allocation factor is 5.78%. (The large variation between the two is a consequence of Noranda's 98% load factor.) In this circumstance, if the costs are allocated on energy while the revenues are allocated on demand there would be a mismatch that would unfairly harm the LTS class, i.e., Noranda. For example, assume Ameren generates energy for an off-system sale and Ameren's cost of the energy (fuel) is $10,000. An energy allocation of this cost would allocate 10.2%, $1,020 of the cost to rate LTS. For

illustration, assume the profitable sale of this energy at a price of $15,000. If this $15,000 of revenue were assumed to be entirely demand related the LTS class would be allocated a credit equal to 5.78% of the $15,000. the amount is $867 based on the 5.78% Ameren production demand allocation factor.

But the result would be unreasonable. While the system as whole enjoyed a $5,000 profit, the combined effect of the cost and revenue allocation approaches would increase the net cost to Noranda by $153 because the allocated costs, $1,020, exceed the $867 of allocated revenue (a credit in the class cost-of-service study). Thus, care must be taken to ensure that all customer classes appropriately share in the costs and benefits of off-system sales. Off-system sales revenues in their entirety should not be allocated in a manner that is different from the allocation of the cost of the sales or there will be unreasonable burdens on some customers and unwarranted benefits for others.

Q WHY IS THE ALLOCATION OF DISTRIBUTION COSTS IMPORTANT TO NORANDA?

A Noranda, not AmerenUE owns, operates and maintains the distribution facilities used for service to Noranda. Therefore, it is important to exclude Noranda from the allocations of the AmerenUE distribution costs in any class cost-of-service study. Ameren has largely reflected this, except for a procedure related to the elimination of lighting as a class in its class cost-of-service study. Ironically, the costs and credits related to lighting, while intended to remove

lighting as a class in the study, result in the appearance of distribution costs for Noranda. But there are no such distribution costs for Noranda. Any class cost-of-service study must reflect the absence of distribution costs for Noranda.

Q WILL YOU HAVE REBUTTAL THAT IS SPECIFIC TO THE CLASS COST-OF-SERVICE STUDY SUBMITTED BY AMERENUE?

A Yes. At the appropriate time I will provide rebuttal to Ameren and others.

Q WHAT COMMENTS DO YOU HAVE ON THE FUEL ADJUSTMENT CLAUSE THAT HAS BEEN PROPOSED BY AMEREN?

A I will not be offering comments on the need for a fuel adjustment mechanism, if any, or the costs and revenues, if any, that might appropriately be made a part of the mechanism. This silence, however, should not be construed as support by Noranda for any such mechanism.

If there is to be a mechanism it is important that the costs and revenues be clearly defined and allocated based on the principles of cost causation, i.e., the same principles and procedures that are appropriate for the design of base rates. A particular concern of Noranda would be the inclusion of any demand related costs or revenues. Also, if off-system sales costs and revenues are included, the concerns for an appropriate treatment of the revenues and costs exists. The extraordinarily high load factor of Noranda creates a large impact on Noranda if the demand related costs or revenues are allocated on energy.

The impact may be either beneficial or harmful to Noranda, depending on the circumstance. Of course any benefit to Noranda would come at the expense of other customers while any benefit to other customers would come at the expense of Noranda. Consequently, if there is to be a mechanism, it is important that all included costs and revenues flow to rates following the principles of cost causation.

Another concern of Noranda is rate stability. Any fuel adjustment mechanism should include provisions that will limit the exposure of customers to sharp or extraordinary increases. This concern may be accommodated by a design that inherently limits volatility or by a fixed cap on rate increases, or some combination of the two. Absent another effective approach, Noranda supports the adoption of a cap on the upward rate volatility pursuant to any fuel adjustment mechanism.

Q DOES THIS CONCLUDE YOUR TESTIMONY?

A Yes it does.

Appendix A

Qualifications of Donald E. Johnstone

Q PLEASE STATE YOUR NAME AND ADDRESS.

A Donald E. Johnstone. My address is 384 Black Hawk Drive, Lake Ozark, MO 65049.

Q PLEASE STATE YOUR OCCUPATION.

A I am President of Competitive Energy Dynamics, L. L. C. and a consultant in the field of public utility regulation.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A In 1968, I received a Bachelor of Science Degree in Electrical Engineering from the University of Missouri at Rolla. After graduation, I worked in the customer engineering division of a computer manufacturer. From 1969 to 1973, I was an officer in the Air Force, where most of my work was related to the Aircraft Structural Integrity Program in the areas of data processing, data base design and economic cost analysis. Also in 1973, I received a Master of Business Administration Degree from Oklahoma City University.

From 1973 through 1981, I was employed by a large Midwestern utility and worked in the Power Operations and Corporate Planning Functions. While in the Power Operations Function, I had assignments relating to the peak

demand and net output forecasts and load behavior studies which included such factors as weather, conservation and seasonality. I also analyzed the cost of replacement energy associated with forced outages of generation facilities. In the Corporate Planning Function, my assignments included developmental work on a generation expansion planning program and work on the peak demand and sales forecasts. From 1977 through 1981, I was Supervisor of the Load Forecasting Group where my responsibilities included the Company's sales and peak demand forecasts and the weather normalization of sales.

In 1981, I began consulting, and in 2000, I created the firm Competitive Energy Dynamics, L.L.C. As a part of my twenty-four years of consulting practice, I have participated in the analysis of various electric, gas, water, and sewer utility matters, including the analysis and preparation of cost-of-service studies and rate analyses. In addition to general rate cases, I have participated in electric fuel and gas cost reviews and planning proceedings, policy proceedings, market price surveys, generation capacity evaluations, and assorted matters related to the restructuring of the electric and gas industries. I have also assisted companies in the negotiation of power contracts representing over $1 billion of electricity.

I have testified before the state regulatory commissions of Delaware, Hawaii, Illinois, Iowa, Kansas, Massachusetts, Missouri, Montana, New Hampshire, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia, and the Rate Commission of the Metropolitan St. Louis Sewer District.