

Exhibit No. :  
Issues: Class Cost Of Service  
Witness: Donald Johnstone  
Type of Exhibit: Rebuttal Testimony  
Sponsoring Party: Noranda  
Case Number: ER-2008-00318  
Date Testimony Prepared: Oct. 14, 2008

AmerenUE

Case No. ER-2008-0318

Prepared Rebuttal Testimony of

**Donald Johnstone**

On behalf of

Noranda Aluminum, Inc.

October 2008

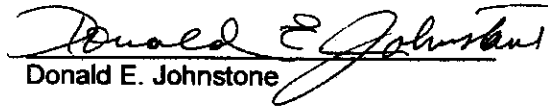
BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the Matter of Union Electric Company )  
d/b/a AmerenUE for Authority to File Tariffs ) ER-2008-0318  
Increasing Rates for Electric Service )  
Provided to Customers in the Company's )  
Missouri Service Area. )

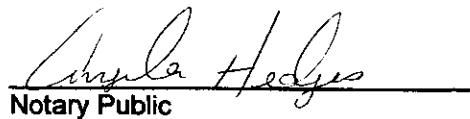
AFFIDAVIT OF DONALD E. JOHNSTONE

STATE OF MISSOURI )  
COUNTY OF Jackson ) ss

Donald E. 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 E. Johnstone

Subscribed and sworn to before me this 14 day of October, 2008.

  
Notary Public

[SEAL]

My Commission expires 8-15-09



Before the  
Missouri Public Service Commission

AmerenUE

Case No. ER-2008-0318

**Prepared Rebuttal Testimony of Donald Johnstone**

1 Q PLEASE STATE YOUR NAME AND ADDRESS.

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

4 Q ARE YOU THE SAME DONALD JOHNSTONE THAT PREVIOUSLY SUBMITTED  
5 DIRECT TESTIMONY IN THIS DOCKET?

6 A Yes.

7 Q WHAT ARE THE PURPOSES OF YOUR TESTIMONY?

8 A One purpose is to support cost of service as the appropriate basis for charges to  
9 Noranda under the Large Transmission Service (LTS) rate schedule. While all  
10 aspects of a class cost-of-service study are important, in this rebuttal I will  
11 address in particular the allocation of production costs and the use of peak  
12 demand data in production allocation factors.

1 Q PLEASE PROVIDE A SUMMARY OF YOUR TESTIMONY.

2 A

- 3 ➤ Noranda is served under the Large Transmission Service (LTS) rate and  
4 continues to support cost of service as the appropriate basis for the rate.
- 5 ➤ OPC and Staff propose production cost allocation methods that are  
6 incorrect and overstate the cost to serve the higher load factor customer  
7 classes including rate class LTS.
- 8 ➤ The use of multiple monthly peaks has the effect of understating the  
9 contributions of the residential and small general service customers to  
10 the system peaks for which the system is designed.
- 11 ➤ I continue to recommend an increase for rate LTS of approximately one  
12 half of the system average percentage increase.

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

15 A As a matter of equity among customers, rates are appropriately based primarily  
16 on the cost of the service that is provided. Noranda does not expect other  
17 customers to pay costs incurred on its behalf and Noranda likewise does not  
18 expect to pay costs associated with the service provided to other customers.

19 Q HOW DOES THE RATE THAT AMERENUE PROPOSES FOR NORANDA COMPARE  
20 TO THE COST TO SERVE NORANDA?

21 A The AmerenUE class cost-of-service study demonstrates that rate LTS is  
22 currently priced above cost. In the event that Ameren prevailed and the  
23 Commission approved the overall increase requested, the AmerenUE class cost-

1 of-service study would support a percentage increase for Noranda roughly  
2 equal to one half of the overall increase. MIEC submitted several cost studies  
3 that incorporate different approaches and in each case the result is a cost to  
4 serve Noranda that is significantly lower than the cost according to AmerenUE.  
5 In contrast the Office of Public Counsel and Staff submitted studies that, if  
6 accurate, would support an above average increase for Noranda. In both cases,  
7 some of the methods followed overstate the cost to serve a high load factor  
8 customer such as Noranda.

9 **Q IS IT YOUR INTENT TO COMMENT ON EVERY ASPECT OF THE OPC AND STAFF**  
10 **STUDIES?**

11 **A** No. Silence on matters not discussed should not be taken to be an  
12 endorsement. Rather, I will focus on two of the most important problems in  
13 the context of the result for rate LTS.

14 **Q WHAT METHODS ARE USED BY STAFF AND OPC FOR THE ALLOCATION OF**  
15 **PRODUCTION COSTS?**

16 **A** Both use an "Average and Peak" method. Both also used multiple monthly  
17 peaks for the measure of class contribution to peak demand.

18 **Q IS THE AVERAGE AND PEAK METHOD APPROPRIATE?**

19 **A** No. It inappropriately increases the importance of average demand relative to  
20 peak demands and the result is a significant overstatement of the cost to serve

1 the high load factor rate classes. Rate LTS, with its 98% load factor is  
2 particularly disadvantaged by the method.

3 Q DOES MS. MEISENHEIMER ATTACH SEVERAL PAGES EXTRACTED FROM THE  
4 NARUC COST ALLOCATION MANUAL?

5 A Yes. The pages address "Judgmental Energy Weightings" in regard to the  
6 allocation of demand related production costs. While variations of the  
7 methods used by OPC and Staff are described, the attachment hardly amounts  
8 to an endorsement of the methods.

9 Q WHAT IS THE PROBLEM WITH THE AVERAGE AND PEAK METHOD?

10 A One way to describe the problem is to consider the effect. It has the effect of  
11 allocating above average demand related production costs to the higher load  
12 factor customer classes as compared to the lower load factor customer classes.  
13 On the other hand, when it comes to energy costs there is no differentiation.  
14 As a result the low load factor classes get the best of both worlds - energy  
15 related costs are only the system average while demand related costs per kW  
16 of peak demand are below average for them. On the other hand, higher load  
17 factor customer classes also pay the system average energy costs, but would be  
18 required to pay demand related production costs per kW that are above  
19 average. This problem may be thought of as an unfair lack of symmetry.

1 Q HOW ARE THE CLASS PEAK DEMANDS MEASURED IN THE VARIOUS STUDIES?

2 A The AmerenUE, Staff and OPC studies all incorporate multiple peaks while MIEC  
3 used a single peak in the measure.

4 Q WHAT IS THE IMPORTANCE OF SELECTING A PROPER MEASURE FOR THE  
5 CONTRIBUTIONS OF THE CUSTOMER CLASSES TO THE SYSTEM PEAK  
6 DEMANDS?

7 A The importance arises because the responsibility for demand related  
8 production costs will be skewed if the wrong measure is used. But first I want  
9 to note that it is the peak demand under design weather conditions that is a  
10 primary consideration in determining how much generation capacity it needed.

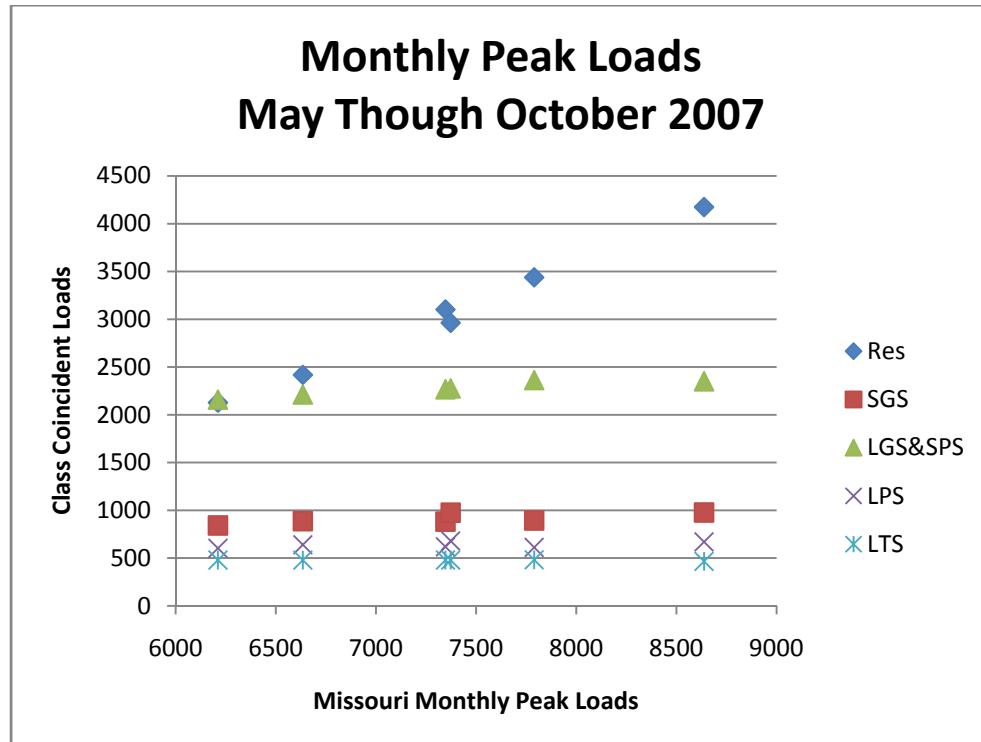
11 Q WHAT IS THE EFFECT OF USING MULTIPLE MONTHLY PEAK DEMANDS AS THE  
12 MEASURE IF MONTHLY PEAKS VARY SUBSTANTIALLY FROM THE ANNUAL  
13 PEAK?

14 A As a practical matter, the effect is to provide a discount for the weather  
15 sensitive loads that create the peak demands, notwithstanding the fact that  
16 the system must be designed to reliably serve the peak demands.

17 Q CAN YOU DESCRIBE AND ILLUSTRATE WHAT HAPPENS WHEN LOWER  
18 MONTHLY PEAKS ARE INCLUDED IN THE MEASURE OF "PEAK DEMAND" FOR  
19 THE PURPOSES OF THE PRODUCTION DEMAND ALLOCATION FACTOR?

20 A Yes. In simple terms, as the temperature increases in the summer period the

1 temperature sensitive loads increase. Most of the temperature sensitive load is  
2 in the residential class, followed by the commercial loads served primarily  
3 under the general service rates. The following chart illustrates the importance  
4 of these loads to the system peak during the 2007 test year.



5  
6 The chart illustrates the contributions of the customer classes to the  
7 monthly peak loads during the period of May through October of 2007 and  
8 includes the annual peak which occurred in August. Other than MIEC, the  
9 parties include some variation the four highest of the six monthly peaks that  
10 are illustrated. The point is that as the residential and commercial loads go  
11 up, the system peak load goes up essentially in lock step. It is the weather  
12 sensitive load that is the driver.



1           Consequently, when the lower monthly peaks are included in a  
2           production demand allocation factor, the importance of the residential and  
3           commercial loads to the system peak is understated.

4    **Q    DOES MS. MEISENHEIMER OBSERVE THAT THERE ARE VARIATIONS IN THE**  
5           **APPARENT CONTRIBUTIONS OF THE CUSTOMER CLASSES AMONG THE**  
6           **MONTHS?**

7    **A    Yes.** Of course a very important point is that the variations are not random,  
8           but are instead directly related to weather and the creation of system peak  
9           loads. Consequently, although she and others incorporate multiple peaks in  
10          the development of the production demand allocation factor because of the  
11          variations, the inclusion of the lower monthly peaks introduces a systematic  
12          bias in the result. This occurs because there is over a 99% correlation between  
13          the level of the system peaks and the coincident residential loads.

14   **Q    WHAT IS THE COMBINED EFFECT OF THE USE OF THE AVERAGE AND PEAK**  
15          **METHOD WITH THE LOWER MONTHLY PEAKS?**

16   **A    The effect due to each is an overstatement of the cost to serve the high load**  
17          **factor customer classes and the combined effect is likewise an overstatement**  
18          **of the costs to high load factor customers.**

1 Q DO THE STAFF AND OPC CLASS COST-OF-SERVICE STUDIES DETRACT FROM  
2 YOUR RECOMMENDATION FOR A BELOW AVERAGE INCREASE TO RATE CLASS  
3 LTS UNDER WHICH SERVICE IS PROVIDED TO NORANDA?

4 A No. I continue to recommend an increase for Rate LTS consistent with my  
5 direct testimony. That is an increase roughly equal to 50% of the system  
6 average.

7 Q DOES THIS CONCLUDE YOUR TESTIMONY?

8 A Yes it does.

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