Exhibit No.:	
Issues:	Class Cost of Service
Witness:	James A. Busch
Sponsoring Party:	MO PSC Staff
Type of Exhibit:	Rebuttal Testimony
Case No.:	ER-2007-0002
Date Testimony Prepared:	February 5, 2007

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY OPERATIONS DIVISION

REBUTTAL TESTIMONY

OF

JAMES A. BUSCH

UNION ELECTRIC COMPANY d/b/a

AMERENUE

CASE NO. ER-2007-0002

Jefferson City, Missouri
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 JAMES A. BUSCH

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

James A. Busch, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 5 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.

James A. Busch

Subscribed and sworn to before me this 2nd day of February, 2007.

NOTARY PUBLIC NOTARY SEAL STATE OF MISSOURI

SUSAN L. SUNDERMEYER
My Commission Expires
September 21, 2010
Callaway County
Commission #06942086

Susan L. Sundermeyer
Notary Public

My commission expires 9-21-10

REBUTTAL TESTIMONY

OF

JAMES A. BUSCH

UNION ELECTRIC COMPANY d/b/a

AMERENUE

CASE NO. ER-2007-0002

Q. Please state your name and business address.

A. My name is James A. Busch and my business address is P. O. Box 360, Jefferson City, Missouri 65102.

Q. By whom are you employed and in what capacity?

A. I am a Regulatory Economist III in the Economic Analysis Section of the Energy Department, Utility Operations Division of the Missouri Public Service Commission (Staff).

Q. Are you the same James A. Busch that filed direct testimony earlier in this proceeding?

A. Yes I am.

Q. What is the purpose of your rebuttal testimony in this case?

A. I respond to the different production capacity allocators parties' rely on in their Class Cost of Service Studies.

Class Cost of Service Study – Allocation of Production Capacity and Transmission Costs

Q. Which parties have class cost of service (CCOS) studies?

A. The Staff, AmerenUE, the Office of the Public Counsel, and the Missouri Industrial Energy Consumers (MIEC) present CCOS study results. Other parties, such as AARP, Noranda, and The Commercial Group discuss CCOS issues in their direct testimony.

Q. Are there various ways to allocate production capacity and transmission costs?

A. Yes. One way is the average and peak (A&P) method. Staff, the Office of the Public Counsel (OPC), and AARP all utilized a variation of the A&P method. Another way is Time-of-Use. OPC, in a second CCOS, used a Time-of-Use allocation method. A third way is the average and excess (A&E) method. Both AmerenUE and MIEC utilized variations of the A&E method.

Q. How does this A&E method used by AmerenUE and MIEC differ from the A&P method used by Staff?

A. The difference between the two methods is how the demand piece of the allocator is determined. Both methods agree on the average piece of the allocator.

Q. What is the difference between the two methods in the demand piece of the allocator?

A. The demand-related piece of the A&E method is determined by taking the difference between a class' peak demand and its average demand. In the case of Mr. Brubaker's CCOS study, each class' peak demand is determined by using the maximum class demands during the summer months of June, July, and August (Brubaker direct, page 25). AmerenUE's method takes each class' peak demand during the summer months of June – September (Cooper direct, page 14, lines 6 – 10).

The Staff's method determines the appropriate demand-related weight by using the Capacity Utilization method as described in the direct testimony of David Roos. This method generally takes the monthly demands for each class for each month of the year,

not just the three highest months, and determines each class' percent of that monthly maximum demand.

Q. Why does an electric utility increase its generation capacity costs?

A. If you follow the logic of the A&E method as proposed by Mssrs. Brubaker and Cooper, you would expect that the only reason an electric utility adds generation capacity is to meet peak demands (Brubaker direct, page 22, lines 9 - 10, Cooper direct, page 13, lines 12 - 15). However, that is not the entire case. Electric utilities add generation capacity costs when it reduces its running costs of meeting its load requirements throughout the year by more than the cost of additional capacity.

Q. What do you mean by your statement that electric utilities add generation capacity costs to meet its load requirements throughout the year rather than just to meet its peak requirements?

A. There are three basic types of electric generation facilities, base, intermediate, and peaking. Base generation facilities are generally the most expensive capacity plants to build and use coal or nuclear energy to generate electricity. Peaking generation facilities are generally the least expensive to build and usually use natural gas to generate electricity. Base generation facilities generally have lower running costs than peaking generation facilities.

Therefore, if, as suggested by Mr. Brubaker in his direct testimony, the primary driver which continues to cause a utility to expand its generation and transmission capacity (Brubaker direct, page 25, lines 5 – 9), it would only make sense that the appropriate generation facility to build would be a relative cheaper peaking facility, i.e. a natural gas combustion turbine. Since the only reason to expand a electric utility's generation capacity are peak loads (according to Mr. Brubaker), it would make zero economic sense to spend

billions of dollars to build a base generation facility since that new generation facility would only be run during the peak months.

Q. If generation and transmission facilities are built to satisfy the yearly loads of an electric utility, is the A&E method employed by Mr. Brubaker and Mr. Cooper more reasonable than the Average and Peak method?

A. No. The A&E method does not take into account the fact that generation facilities are built to meet the entire load of the electric utility. The A&E method unfairly puts too great of a responsibility on the classes that have lower load factors. This happens because the demand-related piece of the allocator is determined by the difference of each class' peak demand and the class' average demand. Thus, a low load factor class would have a greater difference between its peak demand and its average demand causing a greater amount of costs to be allocated to that class.

On the other hand, the A&P method considers all class' contribution to the system's total load, as opposed to each class' excess demands at peak. This is a more reasonable approach because the peak is a function of the loads of each class, not just one class.

Q. Would you provide an example that demonstrates why the shifting of costs to the lower load factor class under the A&E method leads to a less reasonable result than if the A&P method is used?

A. Let's compare two customers. One customer, customer A, has a constant demand of 10 MWs. The other customer, customer B, has an average demand of 5 MWs and a peak demand of 10 MWs for three months out of the year. The load factor of customer A would be 100%. The load factor of customer B would be 50%. According to the A&E method, the excess demand would be zero because its peak would be exactly equal to its

average demand. Thus, all of the demand-related piece would be assigned to customer B, the low load factor customer. The result under the A&P method is more reasonable than the result under the A&E method.

Q. Did Staff use the same A&P method that OPC and AARP used?

A. No. Staff used a 12 non-coincident peak (NCP) variation of the A&P method. OPC used a 3-coicindent peak (CP) variation, while AARP used a 1-CP variation.

Q. Is Staff's 12 NCPs variation more reasonable than the OPC and AARP Coincident Peak variation?

A. Yes, because it takes into account every month of the year, not just the month with the highest peak. Including the entire year is particularly significant with regard to generating facility maintenance. Generation facilities need to be taken out of service for maintenance. This would generally occur during low demand months. The amount of capacity to meet all of the systems loads must take into account the demands in these low demand months as well as the months in which the system may be peaking. Staff's 12 NCP takes this into account.

Q. What is the difference between a noncoincident peak and a coincident peak?

A. A noncoincident peak refers to each class' monthly peak regardless of when it occurred. A coincident peak refers to the each class' monthly peak during the month when the entire systems peak. Therefore, assuming any one individual class' peak did not occur during the system peak, the sum of the noncoincident peaks of each class total more than the coincident peak.

Q. Does this conclude your rebuttal testimony?

A. Yes.