Exhibit No.:	
Issues:	Production Plant Allocation Methods; Seasonal Differentiation of Residential Rates; Large Primary Service Rate Design
Witness:	Wilbon L. Cooper
Sponsoring Party:	Union Electric Company
Type of Exhibit:	Rebuttal Testimony
Case No.:	ER-2007-0002
Date Testimony Prepared:	February 5, 2007

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

REBUTTAL TESTIMONY

OF

WILBON L. COOPER

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
February, 2007

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REBUTTAL TESTIMONY

OF

WILBON L. COOPER

CASE NO. ER-2007-0002

I. IDENTIFICATION AND INTRODUCTION

Q. Please state your name and business address.

A. My name is Wilbon L. Cooper. My business address is One Ameren Plaza, 1901 Chouteau Avenue, St. Louis, Missouri 63166-6149.

Q. Are you the same Wilbon L. Cooper that filed Direct Testimony in this proceeding?

A. Yes, I am.

Q. What is the purpose of your Rebuttal Testimony in this proceeding?

A. The purpose of my testimony is to provide rebuttal comments and evidence that addresses the direct testimonies on the allocation of production plant filed by the Missouri Public Service Commission (Commission or MPSC) Staff witness David C. Roos, Office of Public Counsel (OPC) witness Barbara A. Meisenheimer, Missouri Industrial Energy Consumers (MIEC) witness Maurice Brubaker, Noranda Aluminum, Inc (Noranda) witness Donald Johnstone, American Association for Retired Persons (AARP) witness Ronald J. Binz, and The Commercial Group's (TCG) witness Kevin C. Higgins. Additionally, I will provide rebuttal comments to Mr. Brubaker's testimony on the rate design of the Large Primary Service Class and Mr. Binz's testimony on the seasonal differentiation of the Residential Service Rate. Other Company witnesses will provide additional rebuttal testimony to address certain issues raised by these witnesses. My failure

to address a particular witness' position or argument should not be construed as endorsement of same.

II. PRODUCTION PLANT ALLOCATION

Q. Please summarize the position stated by each of the parties in direct testimony in this docket as it relates to the allocation of fixed production plant.

A. The following provides a high level summary of each party's recommendation on the allocation of production plant:

- Company – The Company utilized a four non-coincident peak (4NCP) version of the Average and Excess Demand Allocation methodology (A & E) that gives weight to both a) class peak demands and b) class energy consumption.
- MPSC Staff – The MPSC staff utilized a twelve non-coincident peak version of the Peak and Average Demand Allocation methodology that gives weight to both a) adjusted class peak demands and b) class energy consumption.
- OPC – The OPC utilized two methodologies: 1) a three coincident peak version of the Peak and Average Demand Allocation methodology (P & A) that gives weight to both a) adjusted class peak demands and b) class energy consumption and 2) a Time of Use (TOU) allocation methodology which assigns demand related fixed production plant investments and associated depreciation reserve to each hour.
- MIEC – The MIEC utilized a three non-coincident peak version of the Average and Excess (A&E) Demand Allocation methodology that gives weight to both a) class peak demands and b) class energy consumption.

- Noranda – Noranda did not perform a class cost of service study; however, Noranda's witness, Mr. Johnstone, stated that "the contributions of customers to the four highest monthly peaks would provide an appropriate measure of the contribution to demand related production costs (direct testimony page 7, lines 3-5)".
- AARP – The AARP utilized a four Coincident Peak (4 CP) Peak and Average method that gives weight to both a) class coincident peak demands and b) class energy consumption.
- The Commercial Group – The Commercial Group accepts the Company's use of the 4NCP Average and Excess method.

Q. Have you prepared a table that summarizes the parties' positions on production plant allocation and the associated production plant allocation factors by customer class?

A. Yes, with the exception of Noranda, who did not submit their own Class Cost of Service Study (CCOSS) or endorse the CCOS study of any other party in the case, Table 1 depicts this summary:

Table 1

Summary of Parties' Production Plant Allocation Methodologies and Class Allocation Factors								
Party	Method	RES	SGS	LGS	SPS	LPS	LTS	Total
Company (UE)	4 NCP – A&E	46.57%	11.16%	19.62%	8.57%	8.30%	5.78%	100%
MPSC Staff	12 NCP – A &P	40.27%	10.57%	30.93% (LGS & SPS)	See LGS	9.83%	8.40%	100%
OPC 1	3 CP P&A	41.42%	10.48%	20.68%	9.57%	9.56%	8.29%	100%
OPC 2	TOU	36.52%	9.93%	21.80%	10.65%	11.09%	10.01%	100%
MIEC	3 NCP – A & E	47.16%	11.23%	19.52%	8.42%	7.94%	5.72%	100%
AARP	4 CP – P & A	40.98%	10.63%	20.92%	9.62%	9.59%	8.26%	100%
Commercial	4 NCP – A&E	46.57%	11.16%	19.62%	8.57%	8.30%	5.78%	100%

Q. With the exception of the OPC TOU allocation methodology, is there a common element in the remaining production plant allocation methods listed in Table 1?

A. Yes, the common element in all the methods is the use of class kilowatthours in the allocation of a portion of production plant. The reference to "A" (Average) in Table 1 for each of the methods is representative of class average demands that are calculated by dividing annual class energy consumption by 8,760 hours per year. Said class averages are computed as a percent of the system average demand and then multiplied by the system's annual load factor of approximately 55%. As a result, 55% of the Company's production plant investment is allocated on an energy basis regardless of the method listed in Table 1 (excepting TOU). Differences among the parties lie with the allocation of the remaining one minus system load factor (45%) portion of production plant investment. Such differences are

driven by: 1) the use of "Excess" demands associated with Non-Coincident Peaks vs. total Non-Coincident or Coincident Peaks, and, 2) the number of peaks utilized.

Q. The Company and the MIEC have proposed the use of an A & E method for the allocation of production plant investment, while the Staff, AARP, and one of OPC's allocation methods proposes the use of the Average and Peak or Peak and Average method ("P&A"). Please comment on the use of the A & E method vs. the P & A method for the allocation of production plant investment.

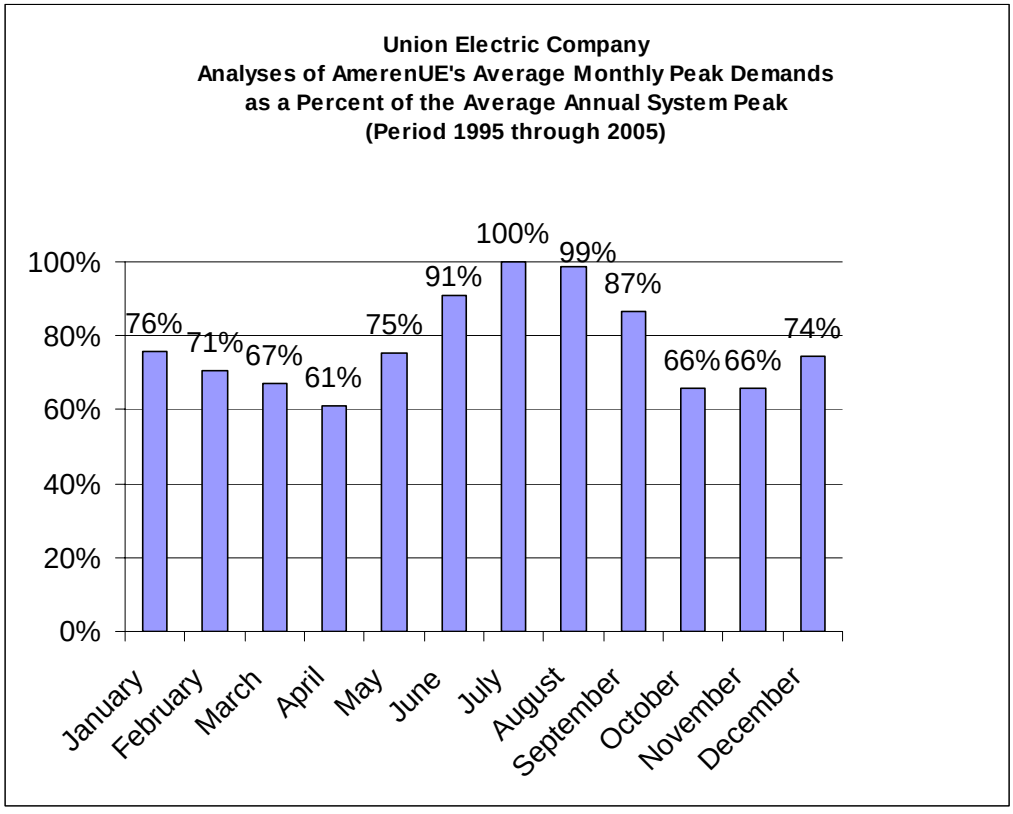
A. The use of the P & A method is inherently flawed as it double counts the average demand of customer classes. This double counting results from the previously described use of class average demand for a portion of production plant allocation (i.e., the 55% system load factor weighting piece) and the use of class peak or non-coincident peak demands, which include an average demand component for the remaining allocation of production plant (i.e., 45%). This double counting results in customers with higher load factors being allocated an inequitable share of production plant investment. This result is driven by the high load factor customers demonstrating a better correlation between average demands and peak demands than do lower load factor customers; therefore, higher load factor customers receive a disproportionate share of the non-average demand (i.e. 45%) portion of production plant investment.

The use of the A & E method is more equitable than the P & A method, as it does not suffer from the same flaw of double counting. Instead, the A & E method utilizes "Excess" demands (i.e., the <u>difference</u> between class non-coincident or peak demands and class average demands) for application of the remaining 45% of production plant investment, thus avoiding any double counting of demands.

Q. Moving now to the number of peaks to be utilized in the A & E methodology proposed by the Company, have you developed a chart depicting the Company's system peaks which significantly impact the Company's production plant investment?

A. Yes. Figure 1 below depicts an analysis of the Company's average monthly peak demands as a percent of average annual system peak for the period 1995 through 2005. Peak data were examined for an eleven year period to smooth the effects on peaks of any unusual weather in any given year.

Figure 1



Q. MIEC witness Brubaker proposes the use of only the months of June through August in his 3 NCP A & E production allocation method. Please comment.

A. Figure 1 clearly shows that demands in the months of June through September dominate annually. The month of September has an average value of 87% and the remaining three summer months are 91%, 99%, and 100%. Therefore, Mr. Brubaker's exclusion of the month of September from his A & E method cannot be supported based on the Company's history of peaks for the period 1995-2005. Figure 1 also demonstrates that Staff's use of 12NCPs in its A & P production allocation method is inequitable as it waters down the significant effect of summer peak demands on the construction of the Company's production plant.

Q. Table 1 also lists the TOU production plant allocation methodology sponsored by OPC witness Meisenheimer. Please comment.

A. The TOU allocation method allocates production plant costs to customer classes over every hour of the year based upon class kWh use in each hour. A summation of the results for each customer class produced the production allocations shown in Table 1. For comparison purposes, the following Table 2 contains the results of Ms. Meisenheimer's TOU analyses for both the class variable energy allocators and the production plant fixed allocators.

Table 2 - OPC Time of Production Allocation Results

	RES	SGS	LGS	SPS	LPS	LTS
Fixed	36.52%	9.93%	21.80%	10.65%	11.09%	10.01%
Variable	35.76%	9.92%	21.86%	10.82%	11.09%	10.54%

Q. Based on Table 2, what observations can be made regarding the results of the TOU allocation methodology for production plant investment?

A. Comparing the percentage share of the variable or running costs and the fixed or capacity costs illustrates how closely the allocation of capacity costs tracks the allocation of variable running costs under the TOU method. In fact, the results for all but the residential class are virtually all the same and the factors are identical for the LPS class. Arguably, the application of the TOU method for the allocation of the Company's fixed production plant investment can be replicated with a simple energy allocation methodology.

Q. Does the TOU method promote the improvement of system load factor?

A. No. This method shifts additional costs from on-peak periods to off-peak periods, whenever off-peak usage is added. This will, in fact, have the effect of discouraging any addition of off-peak use while encouraging additional on-peak use. Such result is the opposite of that which would produce an improvement in overall system load factor, that is reduced demands during system peak periods will reduce or defer future production plant additions, thereby reducing the Company's investment in production plant required to serve its customers. Additionally, improving load factor through additional off-peak sales will result in greater utilization of existing production plant capacity.

Q. Please summarize the Company's position on the use of the TOU method for the allocation of production plant.

A. The TOU allocation method does not result in an equitable allocation of fixed production investment, as there is little or no balance between the consideration of energy and capacity associated with the Company's providing production capacity and this method does not support the important goal of improving system load factor.

Q. Please summarize the Company's overall position regarding the allocation of production plant.

A. The Company's net investment in fixed production assets represents approximately 74% of net original cost rate base in this case. As a result, the variations in allocation of these assets depicted in Table 1 above produce significant differences in class cost of service requirements in this case.

I believe the Company's 4 NCP A & E allocation methodology to be superior to other proposals offered by parties in this docket due to its more balanced consideration of both the energy and excess demands requirements for serving each customer class. The consideration of energy is important due to its relevance in the type of generation on the Company's system, while the consideration of demand is also relevant due to its importance in the magnitude of the capacity of the Company's generating facilities. The A & E method assigns a weight of 55% to class energy requirements and 45% to class excess demands, based on the Company's annual system load factor of 55% during the study period. Additionally, the Company has utilized the 4 NCP A & E methodology for its most recent cases before the Commission and the continued use of this allocation methodology will promote cost of service stability. The Company is not suggesting that there is a single methodology for the allocation of these costs which can be deemed as the absolute, correct and only method for the allocation of production plant. However, it would be desirable to either continue the use of the 4NCP A & E or to have some reasonable resolution of this particular issue in advance of future rate cases. Moreover, it would be highly advantageous to all parties to have the ability to rely upon a standardized methodology whose results could be reasonably predicted.

III. SEASONAL DIFFERENTIATION IN RESIDENTIAL RATES

Q. On page 44 of AARP witness Binz's testimony, he states that "The decision to collect 60% of demand related costs during the summer is arbitrary in the sense that the percentage was once probably chosen to obtain a result". Please comment.

A. As stated in my Direct Testimony, the Company has utilized the results of a study performed to allocate distribution demand related costs to the summer and winter billing seasons. This type of study has been utilized in all of the Company's rate cases since 1987 and reflects analyses of summer and winter demands with average and excess allocation method to determine summer (60%) vs. winter (40%) revenue responsibility for these costs. Mr. Binz did not challenge the Company's analyses, but rather arbitrarily recommends that only 55% of such costs be recovered in the summer with the remaining 45% to be recovered in the winter. As Mr. Binz has provided no cost support for his recommendation, it should be rejected by the Commission. Instead the Commission should continue to adopt the Company's 60%/40% summer to winter split of the distribution revenue requirement based on cost support and, also, existing customers' familiarity with same.

IV. LARGE PRIMARY SERVICE RATE DESIGN

Q. On page 38 of his testimony, Mr. Brubaker objects to the Company's proposed "lock-in" of existing Large Primary Service customers. Please comment.

A. As stated in my Direct Testimony, the proposal is driven by the Company's proposed increases of 24% and 43% for the PS and LPS classes, respectively. If these increases are granted, there is a risk that LPS customers may migrate to SPS to obtain a lower bill. Significant migration of this sort by customers in this large use category could severely impact the Company's ability to have a reasonable opportunity to earn its rate of return authorized in this docket.

Q. Do the Company's existing tariffs contain any "lock-in" provisions?

A. Not explicitly, but the class criteria effectively locks in the customer to a specific class. The Company's Large General Service Classification ("LGS") can be used as an example. Currently, customers who meet the following criteria have only the LGS rate available for service: 1) Non-residential use, 2) secondary voltage service, and 3) demand equal to or greater than 100 kW. Clearly, these customers are effectively "locked-in" to LGS. The use of these types of criteria to determine rate class eligibility is not a novel concept in the industry. Typically, customer classes are established based on reasonable homogeneity in categories such as type of use (e.g., residential vs. other), voltage level (e.g. secondary vs. primary), load characteristics, firm service vs. interruptible service, etc. .

Q. Does this conclude your Rebuttal Testimony?

A. Yes, it does.

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 WILBON L. COOPER

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

Wilbon L. Cooper, being first duly sworn on his oath, states:

1. My name is Wilbon L. Cooper. I work in St. Louis, Missouri and I am employed by Ameren Services Company as the Manager of the Rate Engineering and Analysis Department.

2. Attached hereto and made a part hereof for all purposes is my rebutttal Testimony on behalf of Union Electric Company d/b/a AmerenUE consisting of 11 pages, which has 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.

Wilbon L. Cooper

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

Notary Public

My commission expires: May 19, 2008

CAROLYN J. WOODSTOCK
Notary Public - Notary Seal
STATE OF MISSOURI
Franklin County
My Commission Expires: May 19, 2008