Exhibit No.:	
Issue(s):	Production Cost Allocations; Class Revenue Requirements; Rate Design
Witness:	Wilbon L. Cooper
Sponsoring Party:	Union Electric Company
Type of Exhibit:	Rebuttal Testimony
Case No.:	ER-2011-0028
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2011-0028

REBUTTAL TESTIMONY

OF

WILBON L. COOPER

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a Ameren Missouri

St. Louis, Missouri
March, 2011

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REBUTTAL TESTIMONY

OF

WILBON L. COOPER

CASE NO. ER-2011-0028

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, MO 63103.

Q. Are you the same Wilbon L. Cooper who 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 address the direct testimonies on the allocation of production plant and/or class revenue requirements filed by Missouri Public Service Commission Staff ("Staff") witness Michael Scheperle, and Office of the Public Counsel ("OPC") witness Barbara A. Meisenheimer. Ameren Missouri witness Philip B. Difani will address all lighting related class revenue requirements issues raised by The Municipal Group witness Petree A. Eastman.

Additionally, I will provide rebuttal comments and evidence that address the direct testimonies on rate design by Staff witnesses Scheperle, William (Mack) L. McDuffey, and Hojong Kang, and Missouri American Water Company ("MAWC") witness J. Matt Tracy. Other Company witnesses may 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.

I. 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 fixed production plant:

- Company – The Company utilized a four non-coincident peak ("4 NCP") 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.
- Staff – The Staff utilized a Base, Intermediate, and Peaking ("BIP") method that is a time-differentiated method that assigns production plant costs to three rating periods: (1) peak hours; (2) secondary peak, or intermediate hours; and (3) base loading hours.
- OPC – OPC utilized a 4 CP version of the Peak and Average ("P&A") that gives weight to both a) adjusted class peak demands and b) class energy consumption.
- Missouri Industrial Energy Consumers ("MIEC") – MIEC utilized the Company's recommended 4 NCP version of the Average and Excess Demand Allocation methodology.

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, Table 1 depicts this summary.

Table 1

Party	Method	RES	SGS	LGS/SPS	LPS	LTS	Lighting
Company & MIEC	4 NCP – A&E	46.7%	10.9%	28.4%	7.1%	6.1%	0.7%
MPSC Staff	Base-Intermediate-Peak	46.5%	11.1%	28.4%	7.2%	6.1%	0.7
OPC	4 CP – P&A	43.2%	9.8%	29.5%	8.6%	8.9%	N/A

Q. Is there a common element in the production plant allocation methods listed in Table 1?

A. Yes, the common element in all the methods is the use of class kilowatt-hours to allocate a portion of production plant. The references to "A" (Average) or "Base" for each of the methods shown in Table 1 reflects the fact that class average demands are calculated by dividing annual class energy consumption by 8,760 hours, which is the total number of hours in a year. With regard to the methods with a reference to "A" in Table 1, the class averages are computed as a percentage of the system average demand and are then multiplied by the system's annual load factor of approximately 57%. As a result, 57% of the Company's production plant investment is allocated on an energy basis for the "A" methods. The Staff's BIP method produces a comparable value of approximately 56% allocated on an energy basis. Therefore, the major differences among the parties lie with the allocation of the remaining 43%-44% of production plant investment. These differences are driven by the use of "Excess" demands associated with Non-Coincident Peaks vs. total Non-Coincident or Coincident Peaks.

Q. The Company and MIEC have proposed the use of an A&E method for the allocation of production plant investment, while OPC's allocation method proposes

the use of the P&A method. 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 because 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 57% 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., 43%). This double counting causes customers with higher load factors to be allocated an inequitable share of production plant investment. This is because high load factor customers demonstrate 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., 43%) portion of production plant investment.

The use of the A&E method is more equitable than the P&A method, because the A&E method does not suffer from the same double counting flaw. Instead, the A&E method utilizes "Excess" demands (i.e., the difference between class non-coincident or peak demands and class average demands) for application of the remaining 43% of production plant investment, thus avoiding any double counting of demands.

Q. In the Company's most recent rate case (Case No. ER-2010-0036) did the Commission address the OPC's use of a P&A Demand production allocation method?

A. Yes, at page 84 of the Report and Order in that docket the Commission stated: "As a first step, the Commission will discard the Staff and Public Counsel studies that utilize a Peak and Average Demand production demand allocation method." At page 85 of the

order the Commission again acknowledged the double counting of demands mentioned above by further stating: "Thus, the Peak and Average method double counts the average system usage, and for that reason is unreliable."

Q. Please comment on the Staff's use of the BIP method for allocating fixed production plant vs. the Company's use of the 4 NCP A&E.

A. The Staff's BIP method represents an improvement over its use of a P&A Demand production allocation in Case No. ER-2010-0036. It gives weighting to the energy requirements of customer classes, is listed in the National Association of Regulatory Commissioners ("NARUC") Electric Utility Cost Allocation manual, has been deployed by other utilities, and, moreover, is not flawed as a result of double counting of demands. Staff's application of the BIP for the Company's production plant results in approximately 56% of production demand being allocated on an energy basis which is almost identical to the 57% energy weight under the Company's 4 NCP A&E method. Additionally, Staff's BIP method utilizes a combination of NCP and CP demands without double counting to allocate the remainder, while the Company's 4 NCP A&E utilizes NCP demands only for this remainder. For the Company's system, there is a distinction between the Company's 4 NCP A&E method and the Staff's BIP method; however, said distinction does not cause a material difference in the results (see Table 1). Therefore, any argument over the merits of the 4 NCP A&E method vs. the BIP method for the allocation of the Company's generation assets is academic.

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

A. The Company's net investment in fixed production assets represents approximately 71% of net original cost rate base in this case. As a result, the variation between the Company, MIEC, Staff and the OPC in the allocation of the cost of these assets, as depicted in Table 1 above, contributes materially to the significant difference in class cost of service requirements in this case.

In my opinion, the Company's 4 NCP A&E allocation methodology is superior to the proposals offered by the other parties in this docket because it is more balanced in its consideration of both the energy and excess demand 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 57% to class energy requirements and 43% to class excess demands, based on the Company's annual system load factor of 57% 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 fixed production plant. However, the Commission's decision in the Company's most recently adjudicated electric rate case (Case No. ER-2010-0036) adopted the 4 NCP A&E method. It would be desirable to continue the use of the 4 NCP A&E method in this case, as well as in future rate cases where there is no material change in the Company's load characteristics, because such consistency affords all parties the ability to rely upon a standardized methodology whose results could be reasonably

predicted, thus preventing material swings in class revenue responsibility for the Company's most significant investment in rate base.

II. CLASS REVENUE REQUIREMENTS

Q. Please summarize the Company's position on the allocation of the revenue increase requested in this case.

A. As stated in my direct testimony, the Company is proposing to allocate the requested increase in this case on an across-the-board basis, with an equal percentage increase for all customer classes.

Q. What are the positions of the other non-lighting parties on class specific revenue requirements?

A. The following Table 2 depicts a summary of the positions of the other parties:

Table 2

Party	**Class Revenue Recommendation**
MPSC Staff	• System Average Increase ("SAI") to SGS and LTS classes • Residential and Lighting Classes SAI plus approximately 1% • LGS/SPS no increase for the first $30 million with equal percentage of the remainder
OPC	Two Steps: Step 1: (Revenue Neutral Adjustments as Follows): Residential – No adjustment All Other Classes – Move class revenues half-way towards the class COS. Step 2: (After Revenue Neutral Shift) Equal Percentage Increase to Class Revenues excepting no class receives an overall reduction in their rate revenues considering Step 1 results.
MIEC	Two Steps: Step 1: (Revenue Neutral Adjustments as Follows): Residential +2.4% - +4.8% SGS -1.8% - -3.7% LGS/SPS -2.6% - -5.2% LPS -1.7% - -3.4% LTS -1.2% - -2.5% Lighting +6.2% - +12.4% Step 2: (After Revenue Neutral Shift) Equal Percentage Increase to Class Revenues
MAWC	End the Subsidy to the Residential Class

Q. Considering the results of the Company's class cost of service study which supports non-equal class percentage increases, why should the Commission adopt the Company's across-the-board or equal percentage increase for all classes recommendation?

A. While cost-based rates are an important starting point in developing class revenue targets and rate design, there are other factors (e.g., public acceptance (particularly among the Company's largest rate class - residential customers), rate stability, and revenue stability from year to year) that should be considered when determining class revenue

requirements and designing rates. Considering today's challenging economic conditions, these other factors take on more importance. The Commission's Report and Order in Case No. ER-2010-0036 acknowledges the same at pages 87-88.

> Evaluating the submitted class cost of service studies is only the Commission's first step in designing just and reasonable rates for AmerenUE. In general, it is important that each customer class carry its own weight by paying rates sufficient to cover the cost to serve that class. That is a matter of simple fairness in that one customer class should not be required to subsidize another. Requiring each customer class to cover its actual cost of service also encourages cost effective utilization of electricity by customers by sending correct price signals to those customers. However, the Commission is not required to precisely set rates to match the indicated class cost of service. Instead, the Commission has a great deal of discretion to set just and reasonable rates, and can take into account other factors, such as public acceptance, rate stability, and revenue stability in setting rates.

Additionally, if the Commission were to reject the Company's across-the-board recommendation and adopt class revenue shifts, then the Commission would need to perform an analyses of potential rate migration (i.e., customers qualifying for more than one service classification opting out of their test year classification to another qualifying lower cost classification) and then make appropriate adjustments to the Company's billing units used to set rates in this case. This process would enable the Company to satisfactorily design rates to meet the Commission ordered revenue requirement in this case.

Q. The overwhelming majority of speakers at the local public hearings held in this docket were residential customers expressing their discontent with the impact on their electric bills of the increase being requested in this case. Have you performed an analysis of a mechanism that the Commission could consider to mitigate the impact of a rate increase on residential customers?

A. Yes, I have. I examined the impact of shifting 1% of present revenues from the Company's Service Classification No. 1(M) Residential Service to Service Classification

Nos. 11(M) – Large Primary Service and 12(M) – Large Transmission Service (i.e., the Company's service classifications with the lowest cents per kilowatt-hour realizations). Utilizing present class revenues, as updated for twelve months of usage through July 31, 2010 and shifting 1% of the residential class' revenue to the previously identified classes based on percent of combined revenue, the increase would be approximately 3.5% higher for classifications 11 and 12 than it would be if an across-the-board allocation to all classes was used.

This analysis was performed merely to provide the Commission information on the impact on class revenues if, as a matter of public policy, the Commission chose to mitigate the rate increase for residential customers given the comments from the public at the local public hearings.

III. RATE DESIGN

Q. On pages 18 and 19 of his testimony, Mr. Scheperle outlines eleven recommendations on rate design. Please comment on those recommendations.

A. Three of Mr. Scheperle's recommendations pertain to class revenue requirements, which were addressed above. One of Mr. Scheperle's remaining recommendations addresses the uniformity of certain interrelationships among non-residential rate schedules and six of his recommendations address uniform adjustments of the respective class' rate elements after determination of class rate increase percentages and customer charges. With regard to these seven recommendations, the Company's direct testimony in this docket reflects this same "uniformity" and the Company supports Mr. Scheperle's proposal as it applies to the final determination of affected rates in this docket.

Q. Moving now to Mr. Scheperle's recommendation to increase the residential monthly customer charge to $9.00, do you agree with this recommendation?

A. No. Staff's class cost of service workpapers support a monthly residential customer charge of $9.67 and, as stated in my direct testimony, the Company's CCOSS results supported a residential customer charge of approximately $18. Clearly, Mr. Scheperle's recommendation of $9 per month is lower than that supported either by the Staff's or the Company's studies.

Q. How does the Company's existing monthly residential customer charge compare to similar charges of other electric utilities regulated by the Commission?

A. The following Table 3 depicts this comparison:

Table 3. Current Residential Monthly Customer Charges

Company	Current Residential Customer Charge
Ameren Missouri	$8.00[1]
Empire District Electric Company	$12.52
Kansas City Power & Light Company	$8.67
KCP&L Greater Missouri Operations Company L&P	$7.90
KCP& L Greater Missouri Operations Company MPS	$9.73

[1] Does not include the $0.03 Low-Income Pilot Program Charge.

This shows that the Company's residential customer charge is lagging behind similar charges for three of the four other utilities in the state, which further validates our CCOSS results. Lastly, the expected customer energy use reductions associated with the Company's energy efficiency and demand response efforts and their impact on the Company's ability to earn its authorized rate of return also provide support for the Company's recommendation. Notably, if the Commission were to approve the Company's recommend level of $10 for its residential service customer charge, then the Company's customer charge would be approximately 3% above the average of the other electric utility tariffs within the state.

Q. Mr. Scheperle's last rate design recommendation pertains to charges for lighting service. Please comment.

A. Company witness Phillip Difani will provide rebuttal testimony to this recommendation.

Q. On page 24 of the Staff's Rate Design and CCOS Report (Section V. Other Tariff issues), Staff witness Mr. McDuffey recommends the Commission order the Company to file its entire tariff as a single document bearing the designation "P.S.C. Mo. 6" to replace the several documents currently on file with the Commission with various designations when it files its compliance tariff sheets in this case. Please comment.

A. As this Commission is aware, the period of time between the issuance of its Report and Order in a rate case and the filing of compliance tariffs is relatively short. For example, in Case No. ER-2010-0036 this period was eleven days. Mr. McDuffey's recommendation would require the Company to file in excess of 250 compliance tariff sheets in this case. While the Company respects and supports Mr. McDuffey's desire to improve

the clarity of its tariffs – as such does promote better customer understanding -- the notion of including a new tariff schedule as part of the compliance filing in this case would require the creation/revision and associated review, by both internal and external party(ies), of over 250 tariff sheets within the eleven or so days allotted for that filing. Any attempt to perform such a time-consuming activity within that limited timeframe would likely result in numerous clerical errors, which would necessitate subsequent tariff filings to address these errors and would prove to be very inefficient and administratively burdensome. Moreover, it may not be possible to effectively review and approve approximately 250 tariff sheets within the short period between the issuance of the Commission's Report and Order in this case and the operation of law date for compliance tariff sheets.

Q. Does the Company have an alternative to Mr. McDuffey's recommendation?

A. Yes. The Company would prefer to provide the Staff a draft new electric rate schedule that accommodates Mr. McDuffey's recommendations within one hundred-twenty (120) days of the effective date of new rates in this case. Staff could then conduct a comprehensive review of these draft tariffs and provide feedback to the Company. The Company and Staff would then work collaboratively to file the new electric rate schedule within one hundred-eighty (180) days of the effective date of new rates granted in this case.

Q. Is the Company willing to accept Mr. McDuffey's recommendations on the remaining "Other Tariff Issues" as contained in Staff's Rate Design and Class Cost of Service Report?

A. With the exception of the recommendation to include sample contracts in the Company's tariffs for lighting service, the Company is willing to adopt the other

recommended changes with the caveat that they be made with the new rate schedule filing as described above.

Q. Please comment on Mr. McDuffey's recommendation to include sample contacts for lighting service in its tariffs.

A. Mr. McDuffey appears to rely on the lighting tariffs from KCP&L, which include the recommended sample contracts. However, Mr. McDuffey does not acknowledge the fact that, unlike Ameren Missouri, KCP&L's street lighting classifications are not distinguished by Company-owned vs. customer-owned lighting. Rather, KCP&L's lighting tariffs are distinguished by municipal vs. non-municipal service. Therefore, if Ameren Missouri were to accept Mr. McDuffey's recommendation, a total of four sample contracts would be required-- that is, two sample municipal contracts (one for Company-owned and one for customer-owned) and two sample non-municipal contracts (one for Company-owned and one for customer-owned). Clearly, this approach would be duplicative, potentially confusing and a bit wasteful where the entire tariff schedule is printed and available to customers. Additionally, the inclusion of a sample contract for lighting service within the Company's tariff would likely require a tariff filing with the Commission whenever the Company modified the contract(s) even for minor or housekeeping type changes which again would be inefficient.

IV. LED LIGHTING

Q. On page 36 of the Staff's Class Cost of Service and Rate Design report, Staff witness Kang recommends that if a Light Emitting Diode ("LED") Street and Area Lighting ("SAL") demand-side program is not cost-effective, Ameren Missouri should file a proposed tariff sheet(s) within a twelve month timeframe to provide LED

SAL demand-side program services at cost to its customers. Please comment on this proposal.

A. Ameren Missouri would not be opposed to providing metered lighting service to customer-owned LED SAL installations under its Service Classification No. 6 – Street and Outdoor Area Lighting-Customer Owned. But Ameren Missouri does not believe it is prudent to offer LED SAL under either the present Energy and Maintenance option under Service Classification No. 6 or as part of its standard lighting options under Service Classification No. 5(M) – Street and Outdoor Area Lighting – Company-Owned. Offering LED SAL under either of these scenarios would require maintaining an inventory of LED lighting equipment for what is expected to be a very limited application, which would not likely be cost-effective. Company witness Kyle Shoff's rebuttal testimony states that LED lighting facilities are typically 3-5 times the price of equivalent High Pressure Sodium ("HPS") street lighting facilities. This means that LED SAL are very uneconomical compared to comparable mercury vapor ("MV") or high pressure sodium street lighting installations. Coupling these poor economics with the Company's existing tariffed $100 charge for "early" termination of Company installed lighting facilities makes it unlikely that existing customers will, *en masse*, request premature conversion of MV and HPS lighting systems to LED systems. Therefore, the expected very limited number of requests and the associated lack of economies of scale and scope of LED SAL associated with Mr. Kang's proposal, as it applies to Company ownership of LED SAL equipment, would likely burden the Company and its customers with investment in plant that would be uneconomic.

V. MISSOURI AMERICAN WATER'S PROPOSAL

Q. On pages 4-6 of MAWC witness Tracy's testimony, he makes certain recommendations regarding the "combining" of metering at three MAWC locations. Please comment.

A. First, it should be pointed out that Mr. Tracy's recommendation would more than likely produce lower revenues for the Company, as there would very likely be some diversity of demand for the accounts at each of these locations. That is, from a billing perspective the sum of the parts on a non-combined metering basis will likely be greater than the similar result on a combined basis.

Second, the Company's tariffs applicable to all of MAWC's connections contain the following longstanding language, which clearly prohibits combining meters from separate connections:

> *Cumulation of Services. Service provided through multiple meters to the same customer on the same premises and cumulated for billing purposes under this Service Classification, prior to May 5, 1990, may continue to receive such billing.* ***Unless otherwise required for Company's engineering or other reasons, any additional services installed at customer's request and agreed to by Company on and after May 5, 1990, will not be cumulated or otherwise combined for billing purposes with any other service supplied to customer (emphasis added).***

Mr. Tracy does not allege that the Company's existing billing at these locations violates its tariff. Instead, he suggests that the load at each of these locations is part of a unified operation and, therefore, should be combined. While the load at these locations may be part of a unified operation, the Company's distribution system to serve the respective facilities at each of these locations is not unified. Instead, there are separate or additional distribution connections to each of the facilities therein. Absent engineering or other reasons, the costs to

provide two or more connections at a given location are in excess of those that would be incurred if only one connection was utilized. The non-cumulation, or combining, of meters associated with additional connections recognizes this additional cost because it treats the loads independently (i.e., as if there are two or more separate customers). This treatment is equitable because the customer may have the option of receiving service through a single connection – and by default getting "combined metering" – or getting a second connection. Typically, customers will evaluate the economics of constructing/reconfiguring their distribution system to accommodate one connection and associated "combined metering" vs. getting a second connection from the Company with separate metering and billing. In some cases customers opt for one connection and in other cases customers have opted for multiple connections. As a result, it is reasonable to conclude that the MAWC's economics did not support the construction/reconfiguration of their distribution facilities in order to receive the benefit of combined billing.

Third, if Mr. Tracy's recommendation for combined metering is adopted, equity considerations would require the Company to identify all similarly situated customers and afford them combining of metering also. This requirement would be unduly burdensome and produce results that would not be totally accurate because the Company's billing system does not contain account information to precisely perform this task. Additionally, as stated earlier, the Company's revenues would be reduced.

Fourth, it should be noted that neither the Company's investment in facilities to serve MAWC loads nor its revenue requirement would be reduced as a result of Mr. Tracy's combined metering recommendation. And, if adopted for MAWC and other similarly situated customers, MAWC's proposal would require a re-calculation of the Company's test

year billing units to properly afford the Company the opportunity to earn the rate of return granted in this case.

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-2011-0028

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 the City of St. Louis, Missouri, and I am employed by Union Electric Company d/b/a Ameren Missouri as Manager, Rates and Tariffs.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Ameren Missouri consisting of 18 pages, all of which have 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

Wilbon L. Cooper

Subscribed and sworn to before me this 25 day of March, 2011.

Amanda Tesdall

Notary Public

My commission expires:

Amanda Tesdall - Notary Public
Notary Seal, State of
Missouri - St. Louis County
Commission #07158967
My Commission Expires 7/29/2011