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Witness: Wilbon L. Cooper
Sponsoring Party: Union Electric Company
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2012-0166

SURREBUTTAL TESTIMONY

OF

WILBON L. COOPER

ON

BEHALF OF

**UNION ELECTRIC COMPANY
d/b/a Ameren Missouri**

**St. Louis, Missouri
September, 2012**

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1 **Average and Excess ("A&E") methodology employed by Ameren Missouri, the**
2 **Missouri Industrial Energy Consumers ("MIEC) and the Office of Public Counsel**
3 **("OPC"). Please discuss each of these differences as they relate to the A&E method**
4 **used by the Company, MIEC, and OPC.**

5 A. The first difference listed by Mr. Scheperle is that of the allocation
6 methods generally. Staff utilized a Base, Intermediate and Peak ("BIP") method rather
7 than the A&E method. As noted in both my rebuttal testimony in this case and
8 Mr. Scheperle's own rebuttal testimony, the results produced by these two methods are
9 nearly identical. Therefore, for purposes of this case, any argument over the merits of the
10 A&E method versus the BIP method for the allocation of the Company's generation
11 investment is academic.

12 The second difference listed by Mr. Scheperle involves the time period used.
13 Staff utilized class load and usage data for the twelve-month period ended January 2012,
14 while the Company utilized the most recent data (i.e., twelve months ended September
15 2011) available at the time the Company filed this case. The Company supports Staff's
16 use of more recent data; however, one would not expect the use of more recent data to
17 drive any material differences in the outcomes of the respective studies in this case.

18 The third difference listed by Mr. Scheperle involves the impact of "normal
19 weather." As described in the direct testimony of Company witness Steven Wills,
20 Ameren Missouri's A&E method did reflect "normal weather" as applied to the
21 Company's load and sales data for its original test year of the twelve months ended
22 September 30, 2011. Staff has performed an analysis and sponsored testimony on
23 "normal weather" that differs from the Company's analysis and testimony, and the

1 rebuttal and surrebuttal testimonies of Company witnesses Steven Wills and Allen
2 Dutcher address and rebut those differences. But again, one would not expect these
3 weather-related differences to drive any material differences in the outcomes of the class
4 cost of service studies in this case. Those weather-related differences do, however,
5 materially affect weather normalized billing units and associated revenues used by the
6 Company and Staff for this case. The following table depicts the Company's weather
7 normalized billing kilowatt-hours and associated revenues by service classification for
8 the test year in this case, as updated for customer growth through July 31, 2012:

Table 1: Ameren Missouri Case No. ER-2012-0166
Final Class Test Year Billing Units Including Growth Through July 31, 2012

Service Classification	KWH	Bill Unit Revenues
Residential	13,423,470,643	\$1,171,842,799
Small General Service	3,517,593,806	\$291,155,050
Large General Service	8,135,106,081	\$539,210,036
Small Primary Service	3,558,256,630	\$206,591,334
Large Primary Service	3,771,973,996	\$188,292,236
Large Transmission Service incl Line Losses (FC)	4,314,834,478	\$148,355,268
Lighting	223,587,451	\$34,843,215
MSD	409,901	\$68,501
Total	36,945,232,986	\$2,580,358,439

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10 The Company has been communicating with the Staff regarding their
11 representation of the data depicted in Table 1; however, at the time of preparation of this
12 testimony, Staff's results were unavailable. Based on these communications, we expect
13 the Company's total of \$2,580,358,439 to be in the range of \$10-\$11 million lower than
14 Staff's, with the overwhelming majority of this difference driven by the weather-related
15 differences being addressed by Messrs. Wills and Dutcher.

1 Lastly, Mr. Scheperle discusses the difference associated with impacts of energy
2 efficiency, which are reflected in the Staff's BIP method, but which he claims are not
3 reflected in the Company's A&E method. In making this claim, Mr. Scheperle is
4 referring to the backward-looking energy efficiency adjustments as opposed to the
5 prospective effects that will result from the Commission's recent approval of the
6 Company's MEEIA programs and costs. Mr. Scheperle's observation is correct, as the
7 Company inadvertently omitted the effect of the backward-looking energy efficiency
8 adjustments in its development of class allocators for its production plant investment.
9 Again, one would not expect this difference to drive any material differences in the
10 outcomes in the allocation of the Company's production plant investment in this case, nor
11 would any of these differences in energy efficiency impacts influence the Company's and
12 the other parties' likely recommendations to apportion the rate increase in a way that does
13 not reflect the Class Cost of Service Study ("CCOSS") results.

14 At the end of the day, despite the general differences between the A&E and BIP
15 methods, each of the three differences that Mr. Scheperle described, when properly
16 accounted for, will produce more accurate (although not materially different) results in
17 the allocation of the Company's production plant investment.

18 **III. NRDC MONTHLY CUSTOMER CHARGES**

19 **Q. Do you have any general comments regarding the rebuttal testimony**
20 **filed in this case by Pamela G. Morgan on behalf of the NRDC?**

21 A. Yes I do. At pages 9 and 10 of her rebuttal testimony, Ms. Morgan
22 paraphrases four "considerations" regarding rate design that she claims came from one of
23 the editions of James C. Bonbright's book entitled *Principles of Public Utility Rates*.

1 While I was able to find three of the four considerations in one or both editions of the
2 Bonbright book, I could not find the first consideration listed in Ms. Morgan's testimony.
3 That consideration purportedly concerns the "[q]uality of the price signal concerning the
4 near-, medium-, and long-term cost of using electricity," which Ms. Morgan claims has a
5 "highly related effect on a customer's willingness to invest in structural changes,
6 appliances, or equipment that preserve the customer's desired outcome(s) at a lower use
7 of electricity." As other parts of her testimony make clear, Ms. Morgan believes a major
8 focus – perhaps the primary focus – of the rate design adopted by the Commission in this
9 case should be to allow customers to pursue energy efficiency opportunities and to
10 achieve the benefits of those activities in the shortest time possible, which she refers to as
11 the payback period, and she cites the Bonbright books as support for that position. Her
12 citation of Bonbright is unfounded, however, because in neither edition of his book does
13 he state or even suggest that an objective of rate design should be to allow customers to
14 pursue energy efficiency objectives and achieve the benefits of those objectives in the
15 shortest possible time. But that's not hard to understand because the two editions of Mr.
16 Bonbright's book were copyrighted in 1961 and 1988, respectively, and neither of those
17 dates corresponds to a period when energy efficiency was likely an issue of significant
18 concern to most customers.

19 I also want to note that conspicuously absent from Ms. Morgan's discussion is
20 Bonbright's acknowledgement that "[w]ithout a doubt the most widely accepted measure
21 of reasonable public utility rates and rate relationships is the cost of service."¹ As I
22 discussed in both my direct and rebuttal testimonies in this case, from both a quantitative

¹ Bonbright, James C. *Principles of Public Utility Rates*, Second Edition, March 1988, p. 389.

1 and qualitative standpoint, the results of the Company's CCOSS provide more than
2 adequate support for the recommended changes to the monthly service charges for the
3 Residential and Small General Services rate classes. In contrast, Ms. Morgan has not
4 submitted any quantitative analysis of customer-related costs. Yet, she opposes both the
5 Company's and Staff's proposals to increase these charges to bring them closer to actual
6 cost.

7 **Q. Has Ms. Morgan presented any quantitative evidence in this case to**
8 **support maintaining the Residential and Small General Service monthly customer**
9 **charges at their existing levels?**

10 A. No, Ms. Morgan has not submitted any quantitative analysis on customer-
11 related costs in this case. On the other hand, the Company's CCOSS provides
12 quantitative support for the recommended Residential and Small General Service
13 monthly customer charges in this case.

14 **Q. Moving to the first of Ms. Morgan's paraphrased rate considerations,**
15 **do the changes Ameren Missouri is proposing to the monthly customer charges for**
16 **the Residential and Small General Services classes weaken or distort the price signal**
17 **regarding the cost of electricity and weaken customers' willingness to invest in**
18 **energy efficiency?**

19 A. No, they do not. Ameren Missouri's proposal to increase the monthly
20 customer charge for the Residential and Small General Services rate classes is designed
21 to move those charges closer to actual cost. Consequently, the Company's proposal does
22 not conflict with the price signal consideration, as alleged by Ms. Morgan. In fact, by
23 moving to recover more of the fixed costs of providing electric service to customers –

1 which do not vary with the amount of electricity sold – through the customer charge, the
2 price signal regarding the actual cost of consuming more or less electricity is enhanced.

3 A monthly customer charge that is materially below cost does not send a customer
4 an accurate price signal with regard to the Company's costs of making service available
5 to that customer. From an economic perspective, a more cost-based customer charge
6 would allow customers to make rational decisions as to whether it is in their best interest
7 to "invest in structural changes, appliances or equipment that preserve the customer's
8 desired outcome(s)." No one can conserve customer-related or delivery-related costs
9 because they are fixed in nature, so in a "perfect" study of energy efficiency savings,
10 these costs should not be included in the customer's economic evaluation.

11 In addition, as discussed in the rebuttal and surrebuttal testimonies of Company
12 witness William R. Davis, the Company's proposed increases in these customer charges
13 do not materially alter the economics associated with customers' investments in energy
14 efficiency.

15 **Q. Ms. Morgan also contends that future investments necessary to**
16 **replace the Company's aging infrastructure will be higher if customers do not**
17 **receive clear price signals about the costs of higher electricity use. Please comment**
18 **on this portion of Ms. Morgan's rebuttal testimony.**

19 A. Company witness Warner Baxter's testimony regarding Ameren
20 Missouri's "aging infrastructure" includes categories of costs classified as customer-
21 related in the Company's CCOSS. However, Ms. Morgan's response to that testimony
22 seems to suggest that higher overall costs to customers are only driven by higher energy
23 use. Although higher use always contributes to higher variable costs, as discussed in the

1 direct and rebuttal testimonies of Company witness William Warwick, customer-related
2 costs, which are fixed, do not vary with usage. Rather, these costs reflect the Company's
3 cost of making service available to customers. They include, but are not limited to,
4 customer service, billing, metering and certain distribution (infrastructure) related costs.
5 The need to invest to replace this portion of the Company's infrastructure is based on the
6 age and useful lives of the assets and not on the amount of energy that is produced or
7 sold.

8 Ms. Morgan seems to suggest that, in the interest of energy efficiency, customer
9 charges should never change, despite rising customer-related costs, such as those the
10 Company has and will incur to replace aging infrastructure. But Ms. Morgan's
11 suggestion would ignore the most important consideration in developing reasonable
12 public utility rates: the actual cost of service.

13 Lastly, Ms. Morgan states that the proposed customer charge increase could result
14 in mixed messages to customers. But such mixed messages are not inevitable. It is
15 generally recognized that most customers are willing to pay a fair price for goods and
16 services they consume and use. Therefore, the mixed messages that concern Ms. Morgan
17 can be avoided by clearly communicating to customers that the higher customer charge
18 merely reflects the Company's costs of making service available to customers and has no
19 relationship to usage. Many consumers already are familiar with customer charges that
20 do not vary with consumption (e.g., cable television, internet service, etc.), so I believe
21 these customers would understand and be receptive to a rational explanation of the
22 reasons for any increase in Ameren Missouri's monthly customer charge.

1 **Q. Please respond to Ms. Morgan's contention that a utility's rate design**
2 **should promote "[s]tability and predictability in revenues from the utility's**
3 **standpoint."**

4 A. The Company's proposed increase in the Residential monthly customer
5 charge would result in approximately 11% of the revenue requirement of this class being
6 collected on a non-volumetric basis versus the current level of 9%. Similarly, the
7 Company's proposed increases to the Small General Service customer charge would
8 result in approximately 9% of the revenue requirement of this class being collected on a
9 non-volumetric basis versus the current level of 7%. Clearly, increasing the level of
10 revenue requirement recovery on a non-volumetric basis best achieves Ms. Morgan's
11 second consideration, which is to promote stability and predictability of revenues from a
12 utility perspective.

13 **Q. Ms. Morgan's testimony goes on to state: "In my experience, the**
14 **consideration of predictability and stability in utility revenues is best addressed by a**
15 **decoupling mechanism, which enables the Commission and stakeholders to set rate**
16 **design in the manner most aligned with state policy." Do you agree?**

17 A. Depending on the regulatory framework and the design and application of
18 the decoupling mechanism, Ms. Morgan's statement could be true. On the other hand,
19 depending on structure, decoupling may lead to higher consumption charges and
20 potentially over-penetration of energy efficiency, as I alluded to in my earlier discussion
21 on the need to properly address customer-related and certain delivery-related costs.

22 One decoupling structure, which is commonly referred to as Straight Fixed-
23 Variable rate design, is accomplished by including all fixed costs in the fixed monthly

1 charge. The Commission has adopted this structure for at least one of the natural gas
2 distribution companies operating in Missouri. I would also note that even decoupling rate
3 design mechanisms that do not include all fixed costs in monthly fixed charges generally
4 do include “standard” monthly customer charges and energy or usage components.
5 Regardless, Ms. Morgan’s argument is academic because a decoupling mechanism has
6 not been proposed by any party to this docket.

7 **Q. Please comment on Ms. Morgan’s third contention: that a critical**
8 **component of rate design should be “[s]tability and predictability in bills from the**
9 **customers’ perspective.”**

10 A. As discussed above, the movement of a larger portion of a class’ revenue
11 requirement from a variable, or volumetric, to a fixed component of rate design (i.e.
12 monthly customer charge) absolutely promotes stability and predictability in customers’
13 bills. It seems obvious that the greater the portion of a customer's bill that is fixed each
14 month, the more predictable the bill becomes. And this stability and predictability is
15 beneficial from both a utility and a customer perspective.

16 **Q. Please comment on Ms. Morgan’s fourth contention: that an**
17 **objective of rate design should be to achieve “[f]airness between broad groupings of**
18 **customers (classes) and within a given customer grouping.”**

19 A. First, it's important for the Commission to understand what Ms. Morgan
20 means by "fairness" within a rate class. Several places in her rebuttal testimony
21 Ms. Morgan uses the phrase "intra-class equity" without ever defining that phrase. To
22 better understand her testimony, the Company issued a data request that asked
23 Ms. Morgan to define the phrase "intra-class equity," and her response was as follows:

1 Intra-class equity refers to the soundness of the bases for treating
2 customers within the same customer class similarly despite their
3 differences. For example, within the residential class, a utility might have
4 accounts (residences) that have been connected to the system for decades
5 and the monthly usage within which falls within the bottom quartile of
6 usage among all accounts in the class and makes little contribution to peak
7 because the electrical applications within the residence do not include
8 space conditioning. Another residence might have connected to the
9 system only in the last year, and rely on electricity for both heating and
10 cooling. There are clear cost differences between these accounts for
11 which many utility rate designs typically do not adjust. Even though good
12 reasons may exist to ignore these differences, it is important to make
13 decisions in awareness of them and that is a matter of considering intra-
14 class equity.

15
16 In her rebuttal testimony, Ms. Morgan suggests that this consideration cannot be
17 addressed because the Company's case presented no evidence on these matters. In one
18 respect she is correct; neither the Company nor any other party to this case has presented
19 any evidence regarding the cost differences of serving individual customers within a rate
20 class. The reason for that is simple; no party to this case is proposing that a cost-based,
21 customer-specific rate design is necessary to achieve rates that are fair to customers. But,
22 in other respects, Ms. Morgan's statement is not true because the Company has presented
23 evidence showing that its proposed changes to the monthly customer charges in the
24 Residential and Small General Services classes will have a minimal impact on customers
25 in each of those rate classes.

26 As described in the rebuttal testimony of Mr. Davis, on a revenue neutral basis the
27 Company's recommended customer charges for the Residential and Small General
28 Service classes will result in only a two percent increase in the recovery of each class'
29 respective revenue requirement via customer charges versus volumetric charges. In
30 addition, the Company's proposed increase in the monthly customer charge of \$4 is only
31 approximately 3.7% of the average monthly bill of \$108. Further analysis of the likely

1 impact of the Company's proposed increase in the Residential customer charge was
2 provided in Mr. Davis' rebuttal testimony, and his findings include the following:

- 3 • Ameren Missouri's current monthly Residential customer charge is lower
4 than that of any other investor-owned utility in the state and, if it is
5 approved by the Commission, the proposed \$12 monthly charge will still
6 be lower than the customer charge currently in effect for The Empire
7 District Electric Company;
8
- 9 • The Company's proposed monthly customer charge for the Residential
10 class is significantly lower than similar charges in effect for almost all of
11 Missouri's electric cooperatives;
12
- 13 • There is no evidence that the Company's proposed \$12 customer charge,
14 or the customer charges of other utilities that exceed that amount, violate
15 or are contrary to the objective of MEEIA to value demand-side
16 investments equal to traditional investments in supply and delivery
17 infrastructure;
18
- 19 • On a revenue neutral basis, approval of Ameren Missouri's proposed
20 Residential customer charge will actually decrease total monthly energy
21 costs for approximately one-half of the Company's customers;
22
- 23 • For those customers who do see an increase in total energy costs due to the
24 increase in the monthly customer charge, most will see an increase of
25 between \$5-\$25 per year, and none will receive an increase of more than
26 \$48 per year;
27
- 28 • Approximately 58% of Ameren Missouri's LIHEAP customers will be
29 better off with a monthly customer charge of \$12 compared to the current
30 charge of \$8; and
31
- 32 • The corresponding reduction in the volumetric charge that will result from
33 an increase in the monthly customer charge will benefit customers during
34 hot summer months when air conditioning increases usage.
35

36 In addition, a simple examination of the Company's present Residential energy
37 charges versus the proposed energy charges shows that all customers within the class
38 would receive at least an approximate 11% increase, regardless of usage. This 11% is not
39 substantially different than the 14.6% increase being requested in this case, especially

1 when one considers the additional bill impact of the proposed monthly customer charge
2 increase of 50%.

3 Similarly, with regard to the Small General Service class, the Company's
4 proposed increase in the monthly customer charge for the single-phase customers is
5 \$4.87, or approximately 2.3% of the average monthly bill of \$214 for the entire Small
6 General Service class under the Company's proposed rates. A simple examination of the
7 Company's present Small General Service energy charges versus the proposed energy
8 charges shows that all customers within the class would receive at least an approximate
9 12% increase, regardless of usage. This 12% is not substantially different than the 14.6%
10 increase being requested in the case, especially when one considers the impact of the
11 proposed monthly customer charge increase of 50%.

12 Based on the foregoing analysis, it is extremely likely that the small shift of
13 revenue from volumetric charges to the monthly customer charges of these classes will
14 result in an overwhelming majority of customers in these groups paying at or very close
15 to the average increase of 14.6% being requested by the Company in the case.

16 **Q. Please summarize the Company's opposition to Ms. Morgan's**
17 **recommendation to deny the Company's proposed Residential and Small General**
18 **Service monthly customer charge increases.**

19 A. Despite the Company's rising costs of doing business and CCOSS results
20 supporting increased monthly customer charges for both of these classes, Ms. Morgan
21 appears to oppose any changes to the existing monthly customer charges because she
22 argues that any changes would be contrary to achieving the state's goal of "all cost-
23 effective demand-side savings." But her rationale for opposing the changes to the

1 monthly customer charges that Ameren Missouri is proposing in this case is unfounded.
2 The Company already has demonstrated its support for the objective of achieving “all
3 cost-effective demand-side savings” in the MEEIA case (Case No. EO-2012-0142). But,
4 rather than supporting “cost-effective” savings, Ms. Morgan’s testimony suggests that
5 demand-side savings should be pursued *at all costs*. This recommendation should be
6 rejected by the Commission because it does not reflect the principle of cost causation and
7 equitable cost recovery, nor does it support just and reasonable rates. It also is
8 inconsistent with the stated objective of the Missouri Energy Efficiency Investment Act,
9 which is to value *cost-effective* demand-side programs and supply-side investments
10 equally. Ms. Morgan has provided no evidence that the Company's proposal to move the
11 monthly customer charges for its Residential and Small General Services rate classes
12 closer to cost will have any actual negative impact on the achievement of that objective.

13 **IV. RESIDENTIAL WINTER RATE DESIGN**

14 **Q. At pages 16-19 of Ms. Morgan’s rebuttal testimony, she recommends**
15 **that the Commission order the Company to propose a transition away from its**
16 **Residential declining block rates. Please comment.**

17 A. If this Commission deems that the declining block winter residential rate
18 needs to be examined, then I would strongly recommend that such an examination be
19 performed as part of a generic docket involving all regulated electric utilities that
20 currently employ that rate design instead of on an Ameren Missouri-specific basis in the
21 Company’s next rate case. Examination of this rate design in the context of a generic rate
22 design docket will afford all parties an opportunity to take a comprehensive look at all
23 relevant factors (e.g. elasticity of use, customer bill impacts, impact on ability of the

1 Company to have a reasonable opportunity to achieve the authorized rate of return, etc.).
2 Moreover, because Ms. Morgan's proposal represents a significant shift in rate structure
3 and rate design policies that have been followed for many years in Missouri, such
4 important questions deserve to be considered in a forum where all interested parties can
5 have an opportunity to participate.

6 **Q. Does this conclude your surrebuttal testimony?**

7 A. Yes, it does.

