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and Rate Design
Witness: Maurice Brubaker
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Case No.: ER-2014-0258
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**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of Union Electric Company,
d/b/a Ameren Missouri's Tariff to Increase
Its Revenues for Electric Service

Case No. ER-2014-0258

Surrebuttal Testimony of

Maurice Brubaker

**on Cost of Service, Revenue
Allocation and Rate Design**

On behalf of

Missouri Industrial Energy Consumers

February 6, 2015



MIEC Exhibit No. 305
Date 3/3/15 Reporter SB
File No. ER-2014-0258

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_____)


Case No. ER-2014-0258

STATE OF MISSOURI)
)
COUNTY OF ST. LOUIS) SS

Affidavit of Maurice Brubaker

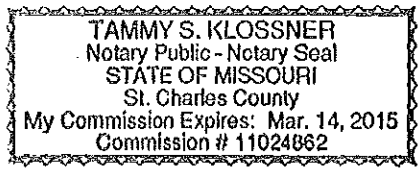
Maurice Brubaker, being first duly sworn, on his oath states:

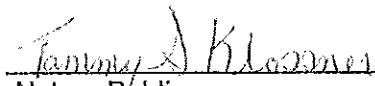
1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.
2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2014-0258.
3. I hereby swear and affirm that the testimony is true and correct and that it shows the matters and things that it purports to show.



Maurice Brubaker

Subscribed and sworn to before me this 5th day of February, 2015.





Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
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Case No. ER-2014-0258

Surrebuttal Testimony of Maurice Brubaker

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A Maurice Brubaker. My business address is 16690 Swingley Ridge Road, Suite 140,
3 Chesterfield, MO 63017.

4 Q ARE YOU THE SAME MAURICE BRUBAKER WHO HAS PREVIOUSLY FILED
5 TESTIMONY IN THIS PROCEEDING?

6 A Yes. I have previously filed both direct and rebuttal testimony on class cost of
7 service, revenue allocation and rate design issues presented in this proceeding.

8 Q ARE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE OUTLINED IN
9 YOUR PRIOR TESTIMONY?

10 A Yes. This information is included in Appendix A to my direct testimony filed
11 December 19, 2014.

12 Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

13 A This testimony is presented on behalf of the Missouri Industrial Energy Consumers
14 ("MIEC"), including Noranda Aluminum, Inc. ("Noranda").

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1 **Introduction & Summary**

2 **Q WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

3 A The purpose is to address certain cost of service, revenue allocation and rate design
4 positions taken in the rebuttal testimony of other parties. First, I address the
5 comments and criticisms that other parties have made of the Noranda rate proposal
6 and evaluation that is included in my direct testimony.

7 Second, I address general cost of service, revenue allocation and rate design
8 issues raised by other parties.

9 The fact that I do not address a particular proposal or principle supported by
10 another party should not be interpreted to mean that I necessarily agree with that
11 proposal or principle.

12 **Q WHAT ARE YOUR PRINCIPAL FINDINGS AND RECOMMENDATIONS?**

13 A These are as follows:

- 14 1. While the Commission Staff does not support Noranda's proposal "at this time," it
15 does not explicitly oppose it either; and offers certain suggestions if rate relief is
16 granted. OPC does not state a position, but urges that if relief is granted,
17 Noranda should continue to pay the Fuel Adjustment Clause ("FAC"). Wal-Mart
18 does not oppose the Commission granting some relief, but offers some
19 suggestions about structure. The only party that expresses outright opposition is
20 Ameren Missouri ... a party that would not experience any increase in cost if the
21 request were to be granted.
- 22 2. Ameren Missouri's argument that the so-called "regulatory compact" somehow
23 precludes granting rate relief for Noranda is without support and a red herring.
- 24 3. The regulatory compact only addresses the entitlement for a utility to have the
25 opportunity to earn a fair rate of return on its investment ... it does not extend to
26 class cost of service, revenue allocation or rate design.
- 27 4. Ameren Missouri's idea that in order to receive relief, service to Noranda must be
28 recharacterized as "wholesale" service is without merit and should be rejected out
29 of hand.
- 30 5. The concept of offering a lower rate in circumstances where a customer provides
31 economic benefit, and where remaining customers are better off by retaining the

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1 customer than losing the load, has wide precedent in the industry. To my
2 knowledge, none of these arrangements in other states have required the sale of
3 power to be recharacterized as wholesale.

4 6. Some parties argue that the benefit of the load retention rates to other customers
5 should be measured on a projected basis. My colleagues, Mr. Dauphinais and
6 Mr. Phillips, address the technical aspects of this argument. Furthermore, it is
7 clear that the Commission will continue to have supervision of any retail rate
8 transaction, and can require adjustments in future rate cases if circumstances turn
9 out to be significantly different than anticipated.

10 7. The FAC should not apply to Noranda. The primary test for the reasonableness
11 of the alternate rate applicable to Noranda is a measurement of avoided cost plus
12 the power price in the MISO market. In contrast, the FAC operates based on
13 changes in average cost of fuel and purchased power, net of revenues from off-
14 system sales. The two concepts are quite different, and there is no logical basis
15 for applying the regular FAC to Noranda's purchases.

16 8. Some of the adjusted class revenue requirement numbers that Staff witness
17 Sarah Kliethermes presents in Tables 1 and 2 of her rebuttal testimony are
18 incorrectly calculated and mis-state the results of my cost of service study.

19 9. Some of the calculations appearing in Table 3 on page 9 of her rebuttal testimony
20 present a distorted view of cost of service by allocating to Noranda a full share of
21 the costs to produce kWh that are sold off system, while at the same time, failing
22 to include any of the revenues from off-system sales. This produces a distorted
23 result that is not meaningful.

24 The Noranda Rate Proposal

25 Q IN GENERAL, WHAT POSITIONS HAVE OTHER PARTIES TAKEN WITH
26 RESPECT TO NORANDA'S RATE PROPOSAL?

27 A OPC does not address the request, except to recommend that, if relief is granted,
28 Noranda continue to pay the FAC if the Commission does not accept OPC's
29 recommendation to discontinue the FAC. Commission Staff does not support the
30 proposal "at this time" but does not explicitly oppose it either. Staff does make certain
31 suggestions for the rate if relief is granted. Wal-Mart does not oppose the
32 Commission granting some rate relief, and has some suggestions about structure.

1 The only party that expresses outright opposition is Ameren Missouri ... a party that
2 would not experience any increase in costs if the request were to be granted.

3 **Q AT PAGE 31 OF HIS REBUTTAL TESTIMONY, IN DISCUSSING THE NORANDA**
4 **RATE PROPOSAL, AMEREN WITNESS REED SUGGESTS THAT DEPARTURES**
5 **FROM COST-BASED RATES FOR RETAIL CUSTOMERS SHOULD BE RARE.**
6 **DO YOU AGREE?**

7 **A** Yes, I do. I have stated many times and in many places that the primary guidepost
8 for setting rates should be cost of service. At the same time, however, as I have
9 discussed in other testimony, departure from this convention is appropriate in cases
10 where it is necessary to preserve the operation of existing customers that provide an
11 economic benefit, and under circumstances where, from a cost perspective, other
12 customers are better off (i.e., have lower rates) than if the customer's load were lost.

13 **Q DOES MR. REED AT ALL ACKNOWLEDGE CIRCUMSTANCES SUCH AS WHAT**
14 **YOU DESCRIBE?**

15 **A** No. Surprisingly, he limits his appetite for exceptions to: (1) non-firm rates; (2) rates
16 like lifeline or rates designed to induce conservation; and (3) greenfield development
17 rates (rebuttal testimony of John J. Reed, page 31).

1 Q HAVING RESTRICTED HIS VIEW TO THESE PARTICULAR TYPES OF RATES
2 WHEN DISCUSSING THE NORANDA PROPOSAL, DOES MR. REED,
3 NEVERTHELESS, ACKNOWLEDGE THE EXISTENCE OF LOAD RETENTION
4 RATES IN AMEREN'S TARIFF?

5 A Yes. On page 40 of his testimony, he alludes to Ameren Missouri's Economic
6 Development and Retention Rider ("EDRR") which is in its tariff. He goes on to state
7 that Noranda does not satisfy the eligibility criteria set forth for this rate (and, in fact,
8 customers on Noranda's rate are explicitly not eligible for this rate).¹

9 One of the principles behind EDRR is that remaining customers would be
10 better off by retaining the customer than losing the load. The "incentive provisions"
11 paragraph of EDRR includes an explicit reference to the expectation that the
12 revenues received from the customer will exceed the applicable incremental cost to
13 provide electric service.

14 The existence of this Rider is an explicit acknowledgement of the potential
15 benefits of load retention rates. The specific conditions in EDRR that are "standard
16 fare" should not be a barrier to recognizing Noranda's specific situation and crafting
17 an acceptable solution outside of the EDRR.

¹Ameren witness Davis has a similar discussion beginning at page 24 of his rebuttal testimony. My responses to Mr. Reed apply to Mr. Davis as well.

1 Q SEVERAL AMEREN WITNESSES (MR. MICHELS BEGINNING AT PAGE 22 OF
2 HIS REBUTTAL AND MR. REED BEGINNING AT PAGE 39 OF HIS REBUTTAL)
3 SUGGEST THAT THE ANALYSES OF AVOIDED COST THAT YOU AND MR.
4 DAUPHINAIS HAVE PRESENTED ARE HISTORIC, AND THAT THE RELIEF
5 SOUGHT BY NORANDA IS PROSPECTIVE. HOW DO YOU RESPOND TO THAT
6 CRITICISM?

7 A In two ways. First, my colleagues, Mr. Dauphinais and Mr. Phillips, are presenting
8 surrebuttal testimony that addresses the specific level of the relevant cost measure.

9 Second, as we have repeatedly stated, the Commission maintains supervision
10 over the rates and, if circumstances turn out to be significantly and continuously
11 different than expected, can make adjustments in future rate cases. While this
12 diminishes the rate certainty that Noranda's desires, it does acknowledge the reality
13 of possible departures from expectations, and provides a viable remedy.

14 Q SEVERAL AMEREN MISSOURI WITNESSES (REED REBUTTAL BEGINNING AT
15 PAGE 33 AND MICHELS REBUTTAL BEGINNING AT PAGE 23) HAVE ALLEGED
16 THAT THE PROVISION OF SERVICE UNDER A RATE THAT IS REDUCED FROM
17 A FULLY ALLOCATED SHARE OF EMBEDDED COST IS IN CONFLICT WITH
18 THE "REGULATORY COMPACT." DO YOU AGREE?

19 A No.

20 Q PLEASE EXPLAIN THE BASIS FOR YOUR DISAGREEMENT.

21 A These witnesses distort the concept of the regulatory compact by trying to extend its
22 scope to principles well beyond the boundaries of the regulatory concept.

1 Q WHAT IS THE REGULATORY COMPACT?

2 A The regulatory compact is a concept fundamental to economic regulation of utilities,
3 including electric utilities. Essentially, in return for a protected monopoly service
4 territory and for assuming the obligation to serve all customers, the utility is provided
5 a reasonable opportunity to recover its costs and earn a fair and reasonable return on
6 its investment. A concise statement of the principle is:

7 "There is also a long-standing, but unwritten, rule that governs cost
8 recovery and lies at the heart of establishing *regulated* prices. This
9 rule is known as the *regulatory compact*. Under the regulatory
10 compact, the regulator grants the company a protected monopoly,
11 essentially a franchise, for the sale and distribution of electricity or
12 natural gas to customers in its defined service territory. In return, the
13 company commits to supply the full quantities demanded by those
14 customers at a price calculated to cover all operating costs plus a
15 "reasonable" return on the capital invested in the enterprise. [Footnote
16 omitted.] (Lesser, Jonathan A. & Giacchino, Leonardo, R.,
17 *Fundamentals of Energy Regulation*, 2007, Chapter 3, page 43)

18 The regulatory compact addresses the obligation of the utility and the
19 opportunity to recover its costs **on an overall basis**. The regulatory compact does
20 not address the basis for establishing rates charged to the various classes of
21 customers, or individual customers, served by a utility. The Ameren Missouri
22 witnesses who attempt to extend the principle to cover class cost allocation and rate
23 design are taking the principle far beyond its intended purpose and usual application.

1 Q IS IT NECESSARY, AS THE AMEREN WITNESSES ASSERT, TO SERVE
2 CUSTOMERS ON A BASIS OTHER THAN RETAIL SUPPLY (FOR EXAMPLE, AS
3 A WHOLESALE CUSTOMER), IN ORDER TO OFFER THEM A "LOAD
4 RETENTION" OR OTHER RATE THAT DEPARTS FROM FULLY ALLOCATED
5 EMBEDDED COSTS?

6 A Of course not. As I indicated above, the regulatory compact does not offer any
7 support for this contention. There is no incompatibility between these load retention
8 rates, or other special rates, and the regulatory compact.

9 Q WHAT IS THE GENERAL PRACTICE IN THE INDUSTRY?

10 A The general practice in the industry is that when load retention or other special rates
11 are appropriate, the customer continues to be served as a retail customer.

12 Q CAN YOU PROVIDE SOME EXAMPLES?

13 A Yes. In Missouri, and as noted above, Ameren Missouri (and the other electric
14 utilities) all have some form of economic development or load retention rate. These
15 rates provide discounts from standard tariffs under various conditions, but no one has
16 ever suggested that these customers should be treated as a wholesale customer or in
17 any other respects different from a retail customer. At various times utilities in
18 Missouri have offered special contracts to their customers, without affecting their
19 status as a retail regulated customer.

20 Q CAN YOU PROVIDE ANY OTHER EXAMPLES?

21 A Yes. I am aware that regulatory commissions in many other states have approved
22 load retention or alternative-priced contracts or tariffs under appropriate

1 circumstances. Among others, this includes states of Arkansas, Illinois, Iowa,
2 Indiana, Michigan, Ohio, Pennsylvania, New York, Alabama, Louisiana and
3 California.

4 In 2010, the Louisiana Public Service Commission approved a load retention
5 agreement for electric service to Boise Packaging and Newsprint, L.L.C. ("Boise") by
6 Cleco Power LLC ("Cleco"). The Commission succinctly summarizes the basis for the
7 rate on page 2 of the Order as follows:

8 "The economic development retention credits or other discounted rates
9 in the contracts for site-specific contract customers, including Boise,
10 are provided to facilitate continued operation of their facilities for the
11 foreseeable future, thereby retaining their associated employment and
12 tax benefits. The base revenue contributions from these customers
13 also serve to mitigate the base rate increases to other retail customers.
14 (Special Order No. 50-2010, Louisiana Public Service Commission,
15 October 28, 2010, page 2)

16 **Q DOES BOISE REMAIN A RETAIL CUSTOMER OF CLECO?**

17 **A** Yes, it does. There was no change in its status as a retail customer. This is typical in
18 the case of special contracts. I cannot think of a single instance in which the approval
19 of a special contract kicked a customer off of retail service.

20 **Q DO COMMISSION STAFF WITNESSES TAKE A POSITION ON WHETHER OR**
21 **NOT NORANDA SHOULD RECEIVE A REDUCED RATE?**

22 **A** No. Neither witness Sarah Kliethermes nor Michael Scheperle address Noranda's
23 need for or entitlement to a reduced rate. They do, however, make certain
24 suggestions with respect to the specific form that such a rate might take, and
25 comment on Noranda's specific proposals. In addition, witness Sara Kliethermes
26 calculates the impact on other customers if Noranda were to leave the system, and

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1 also the contribution that Noranda would provide for the benefit of other customers if
2 it remains a customer at a rate of \$32.50/MWh.

3 **Q WHAT DOES SHE CALCULATE AS THE ADVERSE IMPACT ON OTHER**
4 **CUSTOMERS SHOULD NORANDA NO LONGER BE A CUSTOMER?**

5 A At page 13 of her rebuttal testimony, she presents her conclusion that were Noranda
6 not to be served at all, the other customers would experience a cost increase of
7 approximately \$34 million per year. This increase would occur because the loss of
8 Noranda revenue exceeds the sum of the cost that Ameren Missouri would avoid and
9 the revenue that Ameren Missouri could fetch by selling the equivalent amount of
10 power into the wholesale market place. She also points out that at a rate of
11 \$32.50/MWh Noranda produces a positive contribution of approximately \$14.5 million
12 per year to the benefit of other retail customers.

13 **Q WHAT POSITION DOES STAFF TAKE WITH RESPECT TO WHETHER THE FAC**
14 **SHOULD APPLY TO ANY REDUCED RATE FOR NORANDA?**

15 A Staff expresses a belief that the FAC applicable to other customers should also apply
16 to Noranda in the event that Noranda is granted a reduced rate.

17 **Q DO YOU AGREE?**

18 A No. The primary test for the reasonableness of the alternate rate applicable to
19 Noranda is a measurement of avoided cost plus the power price in the MISO market.
20 These essentially are the incremental costs, or the changes in net costs that occur as
21 a result of serving, or not serving, the Noranda load. The FAC, on the other hand, is
22 designed to track changes in the average cost of fuel and purchased power, net of

1 revenues from off-system sales. The two concepts are quite different, and there is no
2 logical basis for applying the regular FAC to Noranda's sales.

3 **Q BEGINNING AT PAGE 16 OF HER REBUTTAL TESTIMONY, WITNESS SARAH**
4 **KLIETHERMES OFFERS AN ALTERNATIVE NORANDA-SPECIFIC FAC THAT**
5 **WOULD TRACK CHANGES IN THESE INCREMENTAL COSTS. HOW DO YOU**
6 **RESPOND TO HER SUGGESTION?**

7 **A** The kind of analysis that she outlines is what I would expect to be conducted during
8 a review of the rate. However, in order to provide rate certainty between review
9 periods, it is recommended that it not be turned into an adjustment mechanism that
10 would operate outside of a rate case. Being faced with the potential for Commission
11 adjustments during rate reviews already detracts from the stability and predictability
12 that Noranda seeks, and creating continuous exposure would further detract from that
13 goal.

14 **Q DO YOU HAVE ANY OTHER COMMENTS ABOUT WITNESS SARAH**
15 **KLIETHERMES' TESTIMONY?**

16 **A** Yes. She reiterates some of the results of the class cost of service studies she
17 presented in her direct testimony. In general, I addressed most of these points in my
18 rebuttal testimony, but there are a couple of other Noranda-specific points that I will
19 address at this time.

20 Table 3 on page 9 of her rebuttal testimony presents a summary of some
21 different embedded cost calculations for Noranda. While I understand the argument
22 that Staff or others might make about allocating the margin on off-system sales in a
23 manner that is at odds with prior Commission rulings, the third calculation on Table 3

1 (cost of service including a share of interchange-related costs, but excluding a share
2 of off-system sales revenues) is internally inconsistent and produces a materially
3 distorted result, even under Staff's preferred BIP method. If a customer is prohibited
4 from sharing in any of the revenue from off-system sales, the customer similarly
5 should be relieved of supporting any share of the costs associated with creating those
6 revenues. The middle calculation on her table appears to be an attempt to do that;
7 the final calculation is not, and clearly is not valid.

8 **Other Issues**

9 Q HOW DO YOU RESPOND TO AMEREN MISSOURI WITNESS WARRICK'S
10 TESTIMONY AT PAGE 8 OF HIS REBUTTAL CONCERNING THE
11 CLASSIFICATION OF CERTAIN NON-LABOR COSTS IN THE PRODUCTION
12 O&M ACCOUNTS?

13 A Mr. Warwick provides only a very general response. He cites some particular items
14 that he says could be variable, but does not provide any quantification of them. He is
15 critical of my statement that the "hours of operation" used for scheduling maintenance
16 is indicative of the fact that these costs are fixed because they occur on a periodic
17 basis. Instead, he argues that hours of operation would be comparable to kWh. But,
18 Ameren Missouri does not schedule its major maintenance on the basis of kWh
19 generated by its units. Maintenance is performed to maintain plant efficiency and
20 reliability and is not scheduled as a function of the number of kWh generated.
21 Rather, the maintenance intervals are essentially fixed intervals of time as dictated by
22 the calendar, and not by kWh.

1 Q IS THE CLASSIFICATION OF PRODUCTION O&M EXPENSE THAT YOU, STAFF
2 AND OPC HAVE EMPLOYED A METHOD ACCEPTED IN THE INDUSTRY?

3 A Yes. For example, in the current and previous Kansas City Power & Light Company
4 rate cases (Case Nos. ER-2014-0370 and ER-2012-0174); the two previous KCP&L
5 Greater Missouri Operations Company rate cases (Case Nos. ER-2010-0356 and
6 ER-2012-0175) and in the previous Empire District Electric Company rate case (Case
7 No. ER-2011-0004), where a class cost of service study was filed, the utilities (with de
8 minimis exceptions) proposed the identical classification of production O&M expense
9 between fixed and variable categories that I have proposed in this case. It is also the
10 method that the Commission Staff employed in the previously referenced Kansas City
11 Power & Light Company rate cases when making allocations between Kansas and
12 Missouri.

13 Q AT PAGES 14 AND 15 OF HIS REBUTTAL TESTIMONY, AMEREN MISSOURI
14 WITNESS WARRICK COMMENTS ON THE ALLOCATION OF INCOME TAXES.
15 PLEASE EXPLAIN WHY IT IS NOT APPROPRIATE TO ALLOCATE INCOME
16 TAXES ON RATE BASE WHEN THE CALCULATION BEING PERFORMED IS
17 FOR THE PURPOSE OF CALCULATING RATE OF RETURN UNDER RATES
18 CURRENTLY IN EFFECT.

19 A First, let me say, that if the purpose of the calculation were to calculate income taxes
20 at system average rate of return, allocating income taxes on rate base would be
21 essentially the same as allocating them on taxable income. However, because the
22 reality is that at current rates not all classes of service produce the same rate of
23 return, they have different levels of earnings and different amounts of taxable income,
24 which give rise to different amounts of income taxes. Therefore, when calculating

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1 rates of return at present rates, it is appropriate to calculate income taxes based on
2 that measure which determines the obligation to pay income taxes – namely, taxable
3 income. My approach is the same as Staff typically uses, and is generally consistent
4 with the practice in the industry when calculating rate of return at present rates.

5 **Q DO YOU HAVE ANY ISSUE WITH THE CALCULATIONS IN TABLE 1 OF**
6 **WITNESS SARAH KLIETHERMES' REBUTTAL TESTIMONY?**

7 A Yes. I have a disagreement with the calculations presented in both Tables 1 and 2 of
8 her rebuttal testimony.

9 **Q PLEASE EXPLAIN YOUR DISAGREEMENT.**

10 A While she has accurately reported the results of my cost of service study (line labeled
11 "Brubaker Table 3 (Unfactored)"), her adjustments in the line below that in her Table 1
12 (Brubaker Table 3 Factored) is incorrectly calculated, and overstates the cost of
13 service results for all classes.

14 **Q PLEASE EXPLAIN.**

15 A According to the explanation preceding the table, her objective was to adjust the
16 results of each other parties' cost of service study to match Staff's revenue
17 requirement. That in effect appears to be what she has done when adjusting the
18 Ameren Missouri cost of service results by adjusting each class's revenue
19 requirement by the ratio of Staff's revenue requirement to Ameren Missouri's claimed
20 revenue requirement. She next adjusts the Company's numbers by dividing the
21 revenue requirement dollars by Staff's energy at generation. This is inconsistent with
22 the Ameren Missouri cost of service study which has a different amount of energy by

1 customer class than does Staff's study. The correct approach would have been to
2 divide the Ameren Missouri adjusted revenue requirements by Ameren Missouri's
3 energy at generation in order to produce a number consistent with Staff's numbers on
4 line 1 of Table 1.

5 **Q PLEASE NOW EXPLAIN HOW HER ADJUSTMENTS OF YOUR RESULTS ARE**
6 **DISTORTED.**

7 A Without explanation, when she adjusts my results to match Staff's revenue
8 requirement, she doesn't adjust the revenue requirement by the ratio of Staff's
9 revenue requirement to the revenues used in my class cost of service study. Instead,
10 she ratios up my statement of cost per MWh at the meter level by the ratio of Staff's
11 energy at generation to my energy at the meter. As a result, she increases the
12 indicated cost per MWh.

13 This is deficient on two counts. First, she does not properly adjust class cost
14 of service to be consistent with Staff's revenue requirement. Second, ratioing Staff's
15 energy at the generator level to my energy at the meter and then using that ratio to
16 increase my calculated costs per MWh is wrong on two counts. First, the ratio of
17 Staff's energy at generation to my energy at the meter is a meaningless number
18 because the numbers come from two different studies with different sales levels for
19 each class. Second, because of losses energy at the generator is always a larger
20 number than energy at the meter. Translating a cost per kWh at the meter to a cost
21 per kWh at the generator will reduce, not increase, the average cost per kWh as
22 erroneously stated in Table 1.

1 Q HOW MUCH DIFFERENCE DO THESE CORRECTIONS MAKE?

2 A For LPS, the correct adjusted number is \$51.05/MWh as contrasted to Staff's
3 calculated \$53.03/MWh. Staff's calculation overstates the cost for LPS by over \$8
4 million per year. For LTS, the correct number is \$40.39/MWh, as contrasted to
5 \$41.60/MWh on Staff's Table 1. The overstatement for LTS is over \$5 million per
6 year. These errors carry over to Table 2.

7 Q AT PAGES 13 AND 14 OF HIS REBUTTAL TESTIMONY, OPC WITNESS MARKE
8 COMMENTS ON YOUR TESTIMONY ABOUT THE IMPORTANCE OF PRICE
9 SIGNALS TO ENERGY EFFICIENCY PROGRAMS, PARTICULARLY AS IT
10 IMPACTS RESIDENTIAL CUSTOMERS. FIRST, HE COMMENTS THAT
11 RESIDENTIAL CUSTOMERS SEE MEEIA RIDER CHARGES ON THEIR BILL,
12 AND THEREFORE THEY GET THE RIGHT PRICE SIGNAL. IS THIS ALL THAT IS
13 REQUIRED?

14 A No. It is important that residential (and other) eligible customers see the MEEIA
15 charge on their bill so they have an understanding of what they are being charged for
16 and have reason to then inquire as to how they may participate. However, it is still
17 true that if the underlying rates are not properly set, customers will have less incentive
18 than they should to either participate in Ameren Missouri's programs, or to undertake
19 energy efficiency measures on their own. While I agree that showing the charge on
20 the bills is preferable to not showing it, the fact remains that the underlying tariff rates
21 themselves are an important motivator of interest in energy efficiency investments.

1 Q HE ALSO MAKES THE STATEMENT THAT BECAUSE CERTAIN CUSTOMERS
2 HAVE THE OPPORTUNITY TO OPT OUT OF MEEIA PROGRAMS, IT IS NOT
3 POSSIBLE TO MAKE MEANINGFUL COMPARISONS BETWEEN CLASSES, AND
4 SAYS YOU SEEM TO BE IMPLYING THAT ENERGY EFFICIENCY IS ONLY A
5 CUSTOMER BENEFIT AND NOT A RESOURCE TO BE VALUED CONSISTENT
6 WITH SUPPLY-SIDE RESOURCES. HAS HE ACCURATELY CHARACTERIZED
7 YOUR POSITION?

8 A No. First, I disagree that the existence of the opt-out prevents a meaningful
9 comparison between classes. The classes are what they are, the costs are what they
10 are, and the revenues are what they are. Therefore, it is not logical to argue that
11 meaningful comparisons cannot be made.

12 Second, I do agree that supply-side and demand-side resources should be
13 looked at on a consistent basis, and the decision to invest in demand-side resources
14 should be evaluated based primarily on the total resource cost test. Therefore, I am
15 not diminishing the value of energy efficiency resources.

16 Q WHAT ELSE DOES MR. MARKE SAY?

17 A He goes on to argue that savings and benefits from energy efficiency programs are
18 shared by all rate classes and, in fact, says that all ratepayers enjoy the benefits
19 associated with energy efficiency, including reduced power and fuel costs.

20 Q DO YOU AGREE?

21 A No. The primary beneficiary of energy efficiency programs is the customer that
22 receives the incentive or the installation of energy efficiency programs or devices on
23 the customers' premise. The reason this is true is that the only customer that sees a

1 reduced bill is the customer who experiences a reduction in the kWh through the
2 billing meter as a result of these programs. Other customers, who do not experience
3 the reduced consumption of kWh, either see no change in their bill, or see an
4 increase in their bill because their rates go up.

5 **Q DO AMEREN'S ENERGY EFFICIENCY PROGRAMS CAUSE RATES TO**
6 **INCREASE?**

7 **A** Yes. Applying the standard cost effectiveness test, that use economic parameters
8 consistent with those included in the total resource cost test, every one of Ameren
9 Missouri's energy efficiency programs have a rate impact measure ("RIM") score of
10 less than 1. This means that the program causes rates to increase. It is important to
11 note that this is not just a current impact, but is calculated on a net present value
12 basis over the anticipated life of the energy efficiency measure, consistent with how
13 the total resource cost test is calculated. Below I have replicated Table 2.5 from
14 Ameren Missouri's December 22, 2014 filing of its 2016-2018 Energy Efficiency Plan
15 in Docket No. EO-2015-0055. Obviously, every program has a RIM parameter of less
16 than 1.0, and therefore causes rates to increase.

Table 2.5: Cost Effectiveness Tests for Implementation Cycle 2016-18

	TRC	UCT	PCT	RIM	RIM (Net Fuel)	SCT
RES-Lighting	1.24	1.24	∞	0.33	0.39	1.90
RES-Efficient Products	1.48	2.47	2.66	0.69	0.80	2.22
RES-HVAC	1.45	2.25	3.51	0.56	0.63	2.02
RES-Appliance Recycling	1.73	1.73	∞	0.41	0.47	2.23
RES-Low Income	0.79	0.81	5.82	0.35	0.39	1.07
RES-EE Kits	1.53	1.53	15.43	0.38	0.44	2.05
RES-TOTAL	1.36	1.72	5.67	0.46	0.53	1.93
BUS-Standard	1.53	2.00	3.65	0.54	0.65	2.08
BUS-Custom	1.74	2.58	3.40	0.63	0.77	2.39
BUS-RCx	1.40	1.54	6.72	0.49	0.59	1.94
BUS-New Construction	1.48	2.48	2.77	0.64	0.78	2.13
BUS-TOTAL	1.64	2.32	3.52	0.60	0.72	2.26
EE PORTFOLIO TOTAL	1.53	2.07	4.11	0.54	0.64	2.13

1 Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

2 A Yes, it does.

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