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Case No.:	ER-2010-0356
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2010-0356

REBUTTAL TESTIMONY

OF

TIM M. RUSH

ON BEHALF OF

KCP&L GREATER MISSOURI OPERATIONS COMPANY

Kansas City, Missouri
December 2010

REBUTTAL TESTIMONY

OF

TIM M. RUSH

Case No. ER-2010-0356

1 **Q: Please state your name and business address.**

2 A: My name is Tim M. Rush. My business address is 1200 Main Street, Kansas City,

3 Missouri, 64105.

4 **Q: Are you the same Tim M. Rush who prefiled Direct Testimony in this matter?**

5 A: Yes.

6 **Q: What is the purpose of your Rebuttal Testimony?**

7 A: The purpose of my Rebuttal Testimony is to respond to the testimony of certain witnesses

8 of the Staff of the Missouri Public Service Commission ("Staff"), the Office of the Public

9 Counsel ("OPC") and interveners regarding the subjects of

10 1) rate design;

11 2) the fuel adjustment clause ("FAC");

12 3) streetlight offerings and other tariff changes; and

13 4) the change to KCP&L Greater Missouri Operations Company's ("GMO"

14 or the "Company") Rules and Regulations.

15 Specifically I address:

16 I.) Rate Design - the Direct Testimonies of Staff witness Michael Scheperle;

17 Barbara Meisenheimer representing the OPC; Maurice Brubaker

18 representing the multiple industrial parties including Ford Motor

19 Company, Midwest Energy Users Association, Missouri Industrial Energy

1 Consumers, and Praxair, Inc. ("Industrials"); Michael Park representing
2 the City of Lee's Summit ("City"); and Michael Noack representing
3 Missouri Gas Energy ("MGE")
4 II.) Facilities Extension Practices - Michael Noack representing Missouri Gas
5 Energy ("MGE")
6 III.) FAC - Michael Scheperle of the Staff regarding recommendation to
7 modify the FAC to incorporate a more onerous recovery mechanism and
8 to make certain changes to the tariff language,
9 IV.) Street Lighting - Michael Scheperle of the Staff recommendation
10 regarding street lighting;
11 V.) Miscellaneous Tariff Changes - Michael Scheperle of the Staff
12 recommendation regarding street lighting;

13 **I. RATE DESIGN**

14 **Q: Please explain the Company's position regarding rate design in this proceeding.**
15 A: The Company is proposing that the requested increase be spread to all customer classes
16 and all rate components on an equal percentage basis.
17 **Q: Have you reviewed the Direct Testimony provided by the parties in this case on both**
18 **class cost of service study and rate design?**
19 A: Yes. I have reviewed the Direct Testimony of Michael Scheperle on behalf of Staff,
20 Barbara Meisenheimer on behalf of OPC, Maurice Brubaker on behalf of the Industrials,
21 Michael Park representing the City, and Michael Noack representing MGE.
22 **Q: Please describe those testimonies.**

A: The Direct Testimony filed by Staff witness Scheperle proposes different recommendations for a revenue neutral customer class revenue responsibility shift for MPS and L&P divisions.

Based on Staff's Class Cost of Service ("CCOS") study, Staff recommends that each MPS customer class with a negative revenue shift percentage (revenue from the class exceed the cost to serve) over ten percent (-10%) receive no rate increase for any Commission ordered increase for MPS up to and including $5 million; and that each MPS customer class with a positive revenue shift percentage (cost to serve exceeds revenue from the class) over ten percent (+10%) share the first $5 million of any rate increase on an equal percentage basis: and for any increase above $5 million be allocated to all MPS customer classes on an equal percentage basis. The impact of the first $5 million on the affected customer classes would be an increase in their rates of approximately an additional 1%.

Based on Staff's CCOS study, Staff recommends that each L&P customer class with a negative revenue shift percentage (revenue from the class exceed the cost to serve) share the first $3 million of any Commission ordered increase for L&P on an equal percentage basis; and for any increase above $3 million, Staff recommends that the additional amount above $3 million be allocated to all L&P customer classes on an equal percentage basis. The impact of the first $3 million on the affected customer classes would be an increase in their rates of approximately an additional 1%.

Ms. Meisenheimer, representing OPC, proposes a limited revenue neutral shift for the Small General Service, Medium General Service, and Large Power classes. Ms. Meisenheimer relies on the Company's CCOS as the basis for her recommendation. For

1 any approved increase, OPC is proposing it be applied such that no classes should receive
2 a net decrease.
3 Mr. Brubaker, representing the Industrials, supports a revenue neutral shift
4 between the classes based on his CCOS study with any increase applied as an equal
5 percentage increase to all classes with the exception of the Large General Service and
6 Large Power Class energy tail-blocks which he suggests should not be changed.
7 Mr. Park, representing the City of Lee's Summit recommends that any rate
8 increase that the Company receives be limited to only the energy costs of the municipal
9 street lighting tariffs.
10 Mr. Noack, representing MGE, does not specifically address rate design but
11 instead focuses on recommending the elimination of the Residential heating rates and a
12 line extension program.
13 **Q: Are there specific concerns with the rate design recommended by Staff?**
14 A: While Staff's rate design proposal recommends a modest shift in the class revenues, my
15 concern is that it does not follow the CCOS of the Company. Instead, it uses the Staff
16 CCOS study which I believe is flawed. The problems and issues with Staff's CCOS are
17 addressed in the rebuttal testimony of Company witness Paul Normand.
18 My other concern with the Staff rate design is that it did not take into account the
19 customer shifts for the non-residential classes that will likely result from its proposal.
20 Staff's proposal does not explore the disruption of the relationship between classes,
21 leading to the potential rate switching impact of its proposal.
22 **Q: Will Staff's proposal cause a disruption in the Residential rate groups.**

1 A: No. As I understand Mr. Scheperle's proposal, this should not disrupt the residential
2 class.
3 **Q: Would you further explain the proposal presented by OPC?**
4 A: Ms. Meisenheimer utilizes the Company's CCOS study results as the basis for her rate
5 design recommendation, recommending that the Commission accept a limited revenue
6 neutral shift to move the classes closer to the CCOS.
7 For the MPS division, OPC recommends increases to the Large Power and Large
8 General Service classes and reductions to the Residential and Small General Service
9 classes.
10 For the L&P division, OPC recommends an increase to the Large Power and
11 reductions to the Residential, Small General Service and Large General Service classes.
12 OPC places a limiting factor by adding that no customer class should receive a net
13 decrease as the combined result of (1) the revenue neutral shift that is applied to that
14 class, and (2) the share of the total revenue increase that is applied to that class.
15 Likewise, if the Commission determines that an overall decrease in revenue requirement
16 is necessary, then no customer class should receive a net increase as the combined result
17 of: (1) the revenue neutral shift that is applied to that class, and (2) the share of the total
18 revenue decrease that is applied to that class
19 **Q: Are there specific concerns with the rate design recommended by OPC?**
20 A: My main concern is that the OPC recommendation does not explore the disruption of the
21 relationship between the Small General Service class and both the Large General Service
22 and Large Power classes, leading to the potential rate switching impact of its proposal for
23 the MPS division. For the L&P division, my main concern again is that OPC does not

1 explore the disruption of the relationship between the Large Power class and the Small
2 General Service and Large General Service classes. Rate switching risk is very real and
3 exposes the Company a direct loss in revenues.

4 **Q: Has the Company had some recent experience in which a revenue shift was made to**
5 **the classes that caused a major shift in customers from one rate to another?**

6 A: Yes, A similar situation occurred in our Kansas jurisdiction as part of Docket No. 07-
7 KCPE-905-RTS where an adjustment was made to the Large Power Class, breaking the
8 relationship to the adjacent Larger General Service Class. As a result of the relationship
9 change, all but three of KCP&L's Large Power Kansas customers abandoned the rate.
10 The rate switching that occurred resulted in a loss in revenues to the Company of over $1
11 million on an annual basis. The lesson learned was that changes made to only one part of
12 the Company's rate structure are likely to jeopardize the relationship with the other
13 unchanged rates.

14 **Q: What would need to be done to quantify the amount of rate switching that would**
15 **occur?**

16 A: In order to address the issue, each affected customer would need to be re-billed on
17 various rate structures to determine if they would be better off on one rate versus another.
18 This was not prepared nor presented by OPC. It is a very time consuming and difficult
19 task to determine the potential loss that would occur from a change as dramatic as what
20 OPC recommends. If the shifts are not accounted for in the rate design, the Company
21 will be shorted in the recovery of its overall revenue requirement.

22 **Q: Would you further explain the proposal presented by the Industrials?**

1 A: Yes. Similar to the other parties, the Industrials propose an initial revenue neutral shift
2 followed by an application of any Commission-approved increase. In the Industrials' rate
3 design, its CCOS study results for the MPS division indicate the Residential, Large
4 General Service and Lighting classes are not covering its cost of service, while the Small
5 General Service class is providing more than its cost to serve and Large Power needs no
6 change. For the L&P division, the CCOS results of the Industrials' study indicate the
7 Residential and Lighting classes are not covering their cost of service while the Small,
8 Medium, and Large General Service classes are providing more than their cost to serve.
9 The Industrials propose moving these classes approximately 25% of the way toward their
10 cost of service on a revenue neutral basis. The results of the Industrials' CCOS shifts are
11 somewhat modest changes. Any Commission-approved increase would be applied to all
12 rate schedules,
13 **Q: Are there specific concerns with the rate design recommended by the Industrials?**
14 A: While the Industrial's rate design proposal recommends a modest shift in the class
15 revenues, I am concerned because it is based on a flawed CCOS study and does not
16 follow the CCOS of the Company. The problems and issues to the Industrials' CCOS are
17 addressed in the rebuttal testimony of Company witness Paul Normand.
18 My other concern with the Industrials' rate design is that it did not take into
19 account the customer shifts for the non-residential classes that will likely result from its
20 proposal. The Industrials' proposal does not explore the disruption of the relationship
21 between classes, leading to the potential rate switching impact of its proposal.
22 **Q: Have you reviewed the testimony of Michael K. Park?**
23 A: Yes.

1 **Q: Please summarize the testimony.**

2 A. Mr. Park provided testimony on behalf of the City of Lee's Summit. In his testimony,
3 Mr. Park recommends that any Commission-approved increase should not be applied to
4 the estimated street lighting material, installation, and maintenance aspects of the
5 Municipal Street Lighting Service tariff. Mr. Park also provides his opinions concerning
6 the effect an increase will have on the City and ongoing negations with the Company to
7 purchase the street light system.

8 **Q: Do you have any concerns with the recommendation of Mr. Park?**

9 A: Yes I do. Mr. Park attempts to itemize the associated costs of providing municipal street
10 light service and based on his observations, proposes to limit the costs that would be
11 subject to any Commission-approved increase. The assumptions at the foundation of his
12 recommendation fail to take into account the full cost to serve the municipal street light
13 service received by the City and attempts to subdivide services offered through the
14 Commission-approved street tariffs throughout the service territory.

15 **Q: Regarding the full cost to serve the municipal street light service, please explain**
16 **your concern.**

17 A: Mr. Park observes that the City's cost for non-energy components of lighting are not
18 increasing. On that basis he assumes the same costs for the Company should not be
19 increasing. In fact, on page 5 of his direct testimony, Mr. Park states the only increase he
20 acknowledged has occurred in the context of increases to the prevailing wage. I disagree
21 with this characterization. Costs to maintain a skilled workforce, suitable equipment, and
22 even to purchase commodity materials like conductors and poles have increased. Absent

1 a detailed study of the lighting costs it is impossible to know exactly how much this
2 increase might be.
3 The Commission-approved tariff makes available a broad selection of lighting
4 options. The options include different light types, light sizes, pole types, and wiring
5 options. Each option has an associated annual price that represents the Company's cost,
6 both direct and indirect, to provide power and maintain the lighting equipment. Mr.
7 Park's recommendation attempts to substitute the City's cost for the Company's.
8 **Q: Mr. Park expressed his opinion that negotiations around the sale of the street**
9 **lighting system would be negatively impacted by the rate increase. What is your**
10 **opinion concerning this issue?**
11 A: I don't believe this rate case will affect the negotiations any more dramatically than other
12 factors at play in the discussions. As mentioned in Mr. Park's testimony on page 6, the
13 negotiations have been underway for about twelve months.
14 **Q: Would you further explain the proposal presented by MGE?**
15 A: MGE did not offer a rate design proposal per se; instead, MGE requested that the
16 Commission eliminate the Residential Space Heating rates for both MPS and L&P
17 divisions, forcing all Residential customers to be served under the Residential – General
18 Use rate. Additionally, MGE takes issue with our Line Extension program,
19 recommending it be discontinued.
20 **Q: Does MGE provide any cost justification or study for its recommended change to**
21 **available Residential rates?**
22 A: No. No study was prepared or presented that would justify the proposed changes in rate
23 design. MGE simply cites rate under recovery identified in the Company's CCOS study

1 as a justification. Further, MGE labels the under recovery as a "subsidy" within the
2 Residential class, a characterization that is completely incorrect.

3 **Q: Why do you believe this characterization is incorrect?**

4 A: Company witness Paul Normand provides the CCOS study for both MPS and L&P
5 divisions and summarizes the results of the studies in his Direct Testimony. The results
6 of the CCOS study show that each class of customer recovers the cost of service to that
7 class and provides a return on investment. Within each class in the studies, the seasonal
8 rates show the same thing. That is, the summer and winter rates for each class provides
9 recovery of the cost of service and a return on the investment.

10 **Q: Please describe your concerns with MGE's recommendation.**

11 A: MGE's proposed rate changes are focused only on Residential rates and will result in
12 considerable increases for customers in the space heating sub-classes. Additionally, the
13 proposed rate changes do not take into account the Company's requested revenue
14 requirement which would add to the impact.

15 MGE clearly has an ulterior motive - a direct economic incentive to prevent GMO
16 from providing cost-based rates for customers who use electricity to heat their homes.
17 Increasing the electric prices for new or existing customers who utilize electricity for
18 space heating without any cost justification will likely result in less sales of electricity
19 and more natural gas sales for MGE.

20 It is also important to note that outside of MGE, a natural gas company that
21 provides service within GMO's service territory, there were no builders, developers or
22 HVAC dealers that intervened in this rate case pursing rate design changes, especially
23 eliminating rates. One would assume that if there was a large public outcry to eliminate

1 certain rates that there may have been more interest in this case other than those with
2 obvious self interest, such as, the competing natural gas company.

3 **Q: Does AmerenUE or The Empire District Electric offer specific prices for customers**
4 **who utilize electric heating?**

5 A: Not expressly, but their rates do support electric heating. One way that electric utilities
6 price service is often through the summer/winter price differentials. Some electric
7 utilities place more emphasis on much higher summer prices than winter prices to address
8 cost causation. Some utilities have elected to reflect more annual pricing to mitigate the
9 price changes between summer and winter. While I am not aware of whether AmerenUE
10 or The Empire District Electric have such rates, I am aware that each have
11 summer/winter price differentials in their rate designs.

12 **Q: Mr. Noack makes a number of claims, including his position that the electric heating**
13 **rates are "discounted." Do you agree?**

14 A: No. The current residential electric heating rate recovers all short term variable costs and
15 provides a contribution to fixed costs of the Company. As such, it is not a discounted
16 rates. Based on the CCOS that the Company provided, it, like many other rates addressed
17 in the CCOS, does not provide the same return as do others and if you were attempting to
18 move to an equal percentage return for all rate classes, it may need a slightly higher
19 percentage increase than others. Many other considerations would need to be made
20 before you attempted to move all rate schedules to an equal return based on the results of
21 a single CCOS study.

22 **Q: What issues do you believe are critical when contemplating a rate design proposal?**

A: There are a handful of considerations I believe are critical to the Company in contemplating a rate design change. They are:

Provide Revenue Stability and Risk Mitigation – The Company must account for:

1) the price elasticity of any new design in its revenue requirement;
2) the risk of the revenue requirement coming from higher blocks; and
3) the effect of any rate switching that may occur in the revenue requirement.

Implement Cost-Based Rates – The rate design should reflect distinguishing characteristics of various customer usage profiles. This is supported by the testimony of Company witness Paul Normand and the results of the class cost of service ("CCOS") study. The study specifically addresses the different costs between summer/winter and addresses the different costs of electric space heating customers versus general use customers. Rates should provide continuity across the range of customer classes (i.e., you should not have one rate for each customer nor should you have one rate only for all customers)

Minimize Customer Dissatisfaction –

1) Changes must be made in such a way as to minimize significant impacts to customers. This may require a gradual or multi-phase shift, if the impact on customers is considered too harsh for a single shift.
2) If rates are to be no longer offered to new customers (i.e., frozen from new customer locations), the Company should allow for some time period to elapse so that customers currently committed to and installing electric space heat equipment based on current rates can still get the rate to justify their investment.

3) If a rate is to be discontinued to all customers, the rate impact of those customers should be considered and the evaluation of the alternative rates the customer would move to should be considered in the determination of the revenue requirement of the Company.

Simplify the Rate Structure – The Company should seek to combine or reduce rates where possible.

Consider Technology Issues – The Company must be certain it has the technology in place to measure the usage and produce bills for the new rates.

Q: You have detailed your concerns with the respective rate design proposals. How should the Commission proceed?

A: As explained in this rebuttal testimony, the rate design proposals offered by the parties, while well intentioned, are incomplete and expose the Company to serious risks to revenue recovery. In some cases the proposals expose customers to excess price increases. In short, the proposals have not been completely analyzed to the level required by such changes in rate design. The current rate design was developed about ten years ago, originating in an earlier rate case and was ultimately concluded through a structured and separate proceeding that took over a year to complete. The separate proceeding provided the parties an opportunity to focus their effort solely on rate design. It addressed numerous areas such as rate switching, customer impacts and many other factors.

As mentioned earlier, Kansas City Power & Light Company has experienced, to its detriment, the result of unintentional disruption of the relationship between the rate classes, leading to the loss of all but three of customers from the Large Power class in

1 Kansas. The rate switching that occurred resulted in a loss to the Company of over
2 $1 million on an annual basis. The Commission must be aware that changes made to only
3 one part of the Company's rate structure are likely to jeopardize the relationship with the
4 other unchanged rates and must be addressed.

5 As offered in the Direct Testimony of Company witness Paul Normand and
6 myself, the results of the CCOS study indicate that the rate design of all customers
7 requires some modification. Specifically, class revenue requirements should be
8 addressed and the summer winter differentials within classes need to be addressed. This
9 is a very complicated and time consuming undertaking and will likely require a phased in
10 approach over several years to mitigate large impacts to customers in any given year. I
11 again propose that rate design be addressed in a separate case in the future. This case
12 could run its own course and not be tied to a rate case time schedule. It would allow
13 parties to focus on the overall rate design of the Company and address many of the issues
14 as mentioned above. The best time to do this is in a future revenue requirement neutral
15 case.

16 **II. FACILITIES EXTENSION PRACTICES**

17 **Q: Earlier you spoke of MGE's recommendation to eliminate the Line Extension**
18 **program. Do you have any concerns about this recommendation?**

19 A: Yes, I believe MGE is attempting to mischaracterize the program. The Facilities
20 Extension Agreement is a method to assign the costs for system expansion to
21 those responsible for the cost. The Facilities Extension Agreement is simply
22 trying to address equity regarding construction practices for all the different types
23 of customers we serve. MGE has very similar terms and conditions in Section 9,
24 sheets R-58 through R-61 of its current tariffs. Under the GMO tariff for

1 Extension of Electric Facilities is contained on pages R046 through R-54 in the
2 Company's Rules and Regulations filed and approved by the Commission.
3 The Facilities Extension terms referenced by Mr. Noack in no way establish that
4 an "incentive" is paid for customers installing heat pump equipment. The construction
5 charge is part of the overall cost recovery that addresses consideration of the customers
6 load characteristics, and the estimated revenue contribution that is expected from the
7 customers over its useful life.
8 I will note that nothing in the Facilities Extension Agreement precludes the
9 Developer from installing gas service to the development. In fact, it is my impression
10 that most new homes developed under these Facilities Extension terms include gas
11 heating as a back-up to the electric heat pump and gas water heating as well (Type III as
12 listed on the Agreement).
13 **Q: What are some of the benefits of the Company's Facility Extension Practice,**
14 **specifically the Heat Pump Subdivision Agreement?**
15 A: First and foremost, it gets us in front of the developer and we work with them to identify
16 everything from number of lots, types of construction, expected timeframe for the
17 development, expected revenues for the utility, etc. All of this helps us to formulate the
18 construction needs of the subdivision and understand a number of issues or concerns in
19 developing the layout.
20 **Q: Is the developer required to sign the Heat Pump Subdivision Agreement?**
21 A: In GMO it is called the Facilities Extension Agreement and yes, the developer is required
22 to fill out the Agreement prior to our construction commencement. This is our way of

1 knowing with some certainty the expected revenue contribution that will come from the
2 development and help us apply the Line Extension equitably.

3 **Q: Do you consider the waived lot charges and service charges an incentive?**

4 A: We do not waive any lot charges in the GMO territory, all lot charges (construction
5 charges) are required to be paid up front prior to our construction commencement. The
6 Facilities Extension Agreement addresses the distribution for the development and the
7 construction charges address the service line to the customer residence. Again, we are
8 addressing the equity issues and the overall revenue contribution expected from the
9 customer.

10 **Q: Mr. Noack makes additional claims concerning the efficiency and effectiveness of**
11 **natural gas. What is your opinion concerning those claims?**

12 A: I disagree with Mr. Noack's assertions. Company witness Gary Goble addresses MGE's
13 accusations concerning electric effectiveness, particularly with the full-fuel cycle
14 approach and the proposed fuel-switching program. Concerning the efficiency of electric
15 heating, I have found that electric heat pump technologies are very efficient. Typical heat
16 pump systems provide average efficiencies, or how well an appliance turns fuel into
17 useful heat, between 200% and 350% while gas heating system remain at 78-97%.

18 Additionally, customers have expressed other, qualitative advantages to heat
19 pump-based heating. Many customers prefer the uniform heating delivered by heat pump
20 systems as opposed to the cyclical nature of forced-air equipment as provided by a gas-
21 fired furnace. Others prefer the perceived safety of heat pumps. Since heat pumps
22 collect heat from the air or the ground without combustion. No combustion provides
23 piece of mind to customers.

III. FUEL ADJUSTMENT CLAUSE ("FAC")

Q: What is Staff's position in the Rate Design and Cost of Service Report regarding the sharing mechanism of the FAC?

A: Staff is recommending that the current sharing mechanism, which is 95% customer and 5% Company, be modified to require an unprecedented automatic 25% disallowance. This is also described in the Staff Report – Revenue Requirement Cost of Service (Staff Report) and I have addressed this issue in my rebuttal testimony for the Cost of Service filed on Wednesday, December 15, 2010.

In my rebuttal testimony, I addressed the problems with the Staff recommendation regarding the overall financial impact it would have on the Company and how the proposal by Staff is not consistent with the legislation that placed the FAC into existence.

Beginning on page 32 in the Staff's Rate Design and Cost of Service Report, staff again states how the purpose of setting the sharing mechanism to 75%/25% in some way will provide a more appropriate incentive to keep its fuel and purchased power costs down. It states, beginning on line 7, "Change the sharing mechanism from 95%/5% to 75%/25% to provide the Company with a more appropriate incentive to keep its fuel and purchased power costs down;"

Q: How do you respond to that statement?

A: First, I believe that Staff has indicated that they have reviewed and found no imprudent actions on behalf of the Company. Staff's proposal runs counter to economic logic and the real-world examples of the applications of incentive provisions. Staff takes the most volatile utility cost element over which utilities have the least control and which is most critical to providing reliable service and then simply asks the utility to absorb 25% of all

1 costs above the base levels. Yet there is absolutely no evidence in theory, literature, or
2 utility practice that indicates that this level of automatic disallowance is necessary to
3 provide the utility stronger incentives to do what little it can to reduce fuel costs than it
4 already has through its 5% automatic disallowance, the Commission's continuous
5 prudence oversight, and the high visibility into fuel costs and transparent market
6 benchmarks. In short, the Staff is not giving the Company any incentive to reduce costs.
7 To the contrary; the Staff is proposing a disallowance of expenses it has already decided
8 are prudent and is, in reality, recommending that the Commission extract what amounts
9 to an improper penalty that is neither just nor reasonable.

10 **Q: Is the Concept of an FAC, and Staff's proposal for revising it, in your opinion,**
11 **based on the economic theory of economic incentives?**

12 A: Generally. I agree with Staff that the principles underlying a fuel adjustment clause are
13 based on economic incentives. The idea is that regulators cannot perfectly monitor every
14 single decision a utility makes to ensure that it is the best decision from the standpoint of
15 customers. In the absence of this perfect vision, regulators sometimes adopt mechanisms
16 that automatically reward prudent utility behavior and penalize behavior that does not
17 properly serve customers.

18 **Q: Does this concept apply equally to all types of costs a utility incurs?**

19 A: No. I believe that one of the most basic principles of incentive regulation is "don't
20 punish or reward management for what it doesn't control. Instead, focus on the costs and
21 actions it does control."

22 **Q: What does this imply for fuel costs?**

1 A. Fuel costs are large, highly variable, and primarily outside the control of utilities. Fuel is
2 a standardized product purchased from competitive markets for which the market price is
3 quite well known, and which utilities have little influence over. Neither GMO nor any
4 other utility has any choice over the quantity of the fuel purchased - we must purchase
5 enough to run our generators and serve all load. This point has been discussed
6 extensively in other proceedings and this Commission has agreed with this view.[1]

7 **Q: In view of all these considerations, why should there be ANY automatic penalty, i.e.,**
8 **why should the company not recover 100% of its fuel costs?**

9 A: The vast majority of utilities do not have ANY automatic penalties. They are allowed to
10 recover all of their fuel costs subject to the fact that, as with all utility expenditures, they
11 are subject to some form of prudence review.

12 It should also be noted that, among all utility purchase decisions and activities,
13 fuel purchases are one of the most easily and effectively monitored by regulators. The
14 transparency and homogeneity of fuel markets make utilities fuel purchase decisions
15 highly visible. The better visibility and information, availability of strong market
16 benchmarks, and the basic ability of the Commission to monitor prudence all cut directly
17 against any need for any automatic disallowance as an incentive to reduce fuel costs and
18 certainly cut against an automatic disallowance far larger than is applied anywhere else.

19 **Q: Are you saying that no fuel incentive is appropriate whatsoever?**

20 A. No. As the legislature and the Commission have recognized, there is scope for a
21 reasonable incentive mechanism. At this point in time, the Company does not oppose the

[1] In the Matter of the Tariffs of Aquila, Inc., d/b/a Aquila Networks – MPS and Aquila Networks – *L&P Increasing Electric Rates*, Report and Order, Case No. ER-2007-0004, May 17, 2007; and *In the Matter of The Empire District Electric Company's Tariffs to Increase Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company*, Report and Order, Case No. ER-2008-0093 July 30, 2008.

1 current incentive mechanism, which is to absorb 5% of its FAC fuel costs. The point of
2 this discussion is to show that there is no substantive basis for increasing the required
3 disallowance on the basis of this serving as an improvement in the incentive properties of
4 the FAC.

5 **Q. The fuel adjustment clauses for both The Empire District Electric Company and**
6 **AmerenUE - Missouri contain a 95% to 5% sharing mechanism under which the**
7 **can only pass on in rates 95% of any increases or decreases in total net fuel costs**
8 **above the base in there rates. How common are such sharing mechanisms in fuel**
9 **adjustment clauses?**

10 A. Outside Missouri, sharing of total net fuel costs (i.e., total fuel costs net of off-system
11 sales revenues) are quite rare. The Commission has already recognized that fact when it
12 issued its order in Empire's rate case decided in 2008 when it noted: "Of the states that
13 allow fuel adjustment clauses, the vast majority of those states allow 100 percent pass-
14 through of fuel costs.[2] While there may be some examples of fuel adjustment clauses
15 that involve some form of sharing, this type of sharing more typically only involve off-
16 system sales profits, not sharing of total net fuel costs.

17 **Q. Is the Staff's proposed 75% to 25% sharing mechanism of GMO's total net fuel cost**
18 **consistent with regulatory mainstream?**

19 A. No. The 75% to 25% sharing mechanism as proposed by the Staff is entirely out of the
20 regulatory mainstream.

21 **Q. Is there support for your statement that Staff's proposal is entirely out of the**
22 **regulatory mainstream?**

[2] Report and Order in ER- 2008-0093, p. 41 (issued July 30, 2008).

1 A. Yes, under my direction, *The Brattle Group* surveyed of the nature of fuel adjustment
2 clauses of all 37 sizable utilities in other non-restructured Midwestern and neighboring
3 states. Of these 37 utilities, all but one utility (MidAmerican in Iowa) have fuel
4 adjustment clauses or fuel rules that allow fuel-specific changes between general rate
5 cases for positive and negative changes in observed or expected fuel costs.[3] Of these 36
6 fuel adjustment clauses in other non-restructured Midwestern and neighboring states,
7 <u>none</u> involve sharing of total net fuel costs. In fact, only twelve of these 36 fuel
8 adjustment clauses involve <u>any kind of sharing</u> and that sharing is focused on only off-
9 system sales margins. In the context of these facts, Staff's 75% to 25% sharing
10 proposal is clearly and entirely out of the regulatory mainstream.

11 **Q: What would implementation of Staff's proposal do to the attractiveness of fuel**
12 **adjustment clauses in Missouri?**

13 A. It would greatly devalue fuel adjustment clauses in Missouri. It will essentially
14 undermine the very purpose of fuel adjustment clauses by forcing utilities to file rate
15 cases whenever fuel costs change by any significant amount. This is particularly
16 important in view of the fact that fuel adjustment clauses in Missouri are already less
17 attractive, in terms of regulatory lag, than in most other states. For example, Missouri
18 fuel adjustment clauses are based on historical costs, while the fuel adjustment clauses
19 in many other states are based on projected costs. For example, of the 36 fuel
20 adjustment clauses for sizeable utilities in other non-restructured Midwestern and
21 neighboring states, 19 are based on projected costs. Importantly, of the fuel adjustment
22 clauses that rely on historical costs, a significant majority allows for monthly
23 adjustment of rates. In contrast, Missouri fuel adjustment clauses rely on historical fuel

[3] The major Wisconsin utilities operate under such fuel rules.

1 costs and are adjusted only twice or three times a year. This means that, even if there
2 was not any sharing, Missouri fuel adjustment clauses are already significantly less
3 attractive than the majority of adjustment clauses in other relevant states. Changing the
4 sharing from 95% to 75% would substantially worsen this situation and, in my mind,
5 undermine the very purpose of fuel adjustment clauses. It would also be inconsistent
6 with the legislation that allowed for the implementation of such adjustment clauses in
7 Missouri and it would also backfire in terms of supporting the financial strength of
8 Missouri utilities.

9 **Q. Please explain your view of why such changes could backfire and undermine the**
10 **financial strength of Missouri utilities.**

11 A. My opinion is supported by the testimony of two investment analysts, who were
12 referenced in the Commission's Order addressing Ameren-Missouri's last rate case:

13 Gary Rygh, a witness for AmerenUE explained that a significant
14 modification to AmerenUE's fuel adjustment clause outside the context of
15 a prudence review process could lead investors to conclude either that
16 AmerenUE was improperly managing its net fuel costs, or that the
17 Commission was acting rashly in overturning regulatory stability in
18 Missouri. Julie Cannell, another witness for AmerenUE, explained that
19 investors value certainty, fairness, stability, and predictability. She
20 indicated 'a lack of consistency in a commission's actions or decisions
21 serves to increase the investment risk associated with a utility.' Increased
22 financial risk results in an increase in a company's cost of borrowing,
23 ultimately increasing costs that will be passed on to ratepayers.[4]

24 **Q: Turning back to the basic idea of incentives and penalties underlying staff's**
25 **automatic disallowance proposal, is there any evidence in other contexts that such a**
26 **large automatic disallowance provides the right incentives?**

27 A: No, there is not. Although I am not an expert in incentive regulation, and have not done a
28 comprehensive survey of the application of this sort of incentive, I have not seen or

1 located any other similar incentive schemes in other markets, much less in the utility
2 industry.

3 **Q. Please summarize your conclusions regarding the underlying economic motivations**
4 **of Staff's Proposal?**

5 A. Staff's proposal goes in the opposite direction to economic logic and the real-world
6 examples of the applications of incentive provisions. Staff takes one utility cost element
7 that is least under the control of utilities, most volatile, and most critical to providing
8 reliable service and simply asks the utility to absorb 25% of all costs above the base
9 levels. Yet there is absolutely no evidence in theory, literature, or utility practice that
10 indicates that this level of automatic disallowance is necessary to provide the utility
11 stronger incentives to do what little it can to reduce fuel costs than it already has through
12 its 5% automatic disallowance, the Commission's continuous and unquestioned prudence
13 oversight, and the high visibility into fuel costs versus transparent market benchmarks.
14 In short, the Staff is not gaining any greater Company efforts at cost saving through this
15 disallowance, it is only disallowing expenses it has already decided are prudent.

16 **Q: Staff's assertion that the current 5% sharing number provides insufficient**
17 **incentives to purchase fuel at lowest cost is based on nothing other than their**
18 **opinion of how much money the company should be required to forego. What is the**
19 **evidentiary basis for staff's proposal?**

[4] Report and Order in ER- 2010-0036, pp. 77-78 (issued May 28, 2010).

1 A. There are only three substantive points Staff puts forward to support its proposal.[5] Of the
2 three, the first point supports GMO's position, not Staff's, the second point is pure
3 opinion and the third is logically incorrect.

4 • Staff first makes the point that the Commission has already concluded that 100%
5 pass through of fuel costs does not provide utilities with adequate fuel cost
6 savings advantage. (p. 191). However, this finding was made in the context of the
7 Commission approving a 95/5 sharing mechanism. GMO does not contest this
8 Commission finding in its entirety -- just the opposite. As noted above, the
9 current mechanism was analyzed and validated in a number of recent proceedings.
10 Staff's first point actually supports GMO's position, not Staff's.

11 • Staff's second point is that the average amount of guaranteed under-collection by
12 GMO, approximately $2 million per year, or 2.3% of annual revenue, is -- solely
13 in its opinion -- too small to provide an incentive to minimize fuel purchase costs.
14 This opinion is not based on anything other than looking at the percentage of
15 overall revenues GMO must absorb as required fuel cost losses and deciding how
16 large they feel they should be. This is not an analytic or factual basis for
17 Commission action, it is merely opinion. The appropriate evidentiary basis for
18 the Commission to change the FAC is some evidence that GMO, or any other
19 utility that has a 95/5% sharing mechanism, is doing less well at reducing fuel
20 costs than a utility with a lower percentage pass-through, or some other evidence
21 that there is inadequate effort being paid to keeping fuel costs as low as possible..
22 Staff does no such analysis. Instead, they contradict the very point they are

[5] *Revenue Requirement Cost Of Service Report Of KCP&L Greater Missouri Operations Company*, Missouri Public Service Commission Staff Report ,Case No. ER-2010-0356, November 17, 2010.

1 making by concluding (p. 198 l.2-3) that GMO's fuel purchases have been
2 entirely prudent. There is no comparison of GMO's activities to other utilities
3 with or without a 95/5 sharing, no evidence that utilities with higher mandated
4 fuel disallowances are performing better in this regard, and no other facts or
5 analysis of any kind.

6 **Q. What is Staff's third and final point supporting its proposal?**

7 A. The last point staff makes (p. 198, l. 6-12) is that GMO did not rebase its fuel costs in this
8 rate case. From this, Staff erroneously reaches a conclusion that the Company is not
9 incented to reduce its fuel costs:

10 "To further illustrate the lack of incentive with the current 95/5 sharing
11 mechanism, Staff points out that neither in this rate case nor in GMO's last
12 rate case did GMO propose to reset its Base Energy Cost in the FAC it
13 proposed or in its test year total revenue requirements that it filed as part
14 of either of its rate cases, even though GMO had been responsible for
15 approximately $2 million annually of the FAC's under-collected amount
16 during the filed test year period of each rate case."

17 **Q. Why do you call this point simply erroneous?**

18 A. As a simple matter of logic, it does not follow that the Company's decision not to rebase
19 its fuel costs in the filed test year revenue requirement implies in any way that the
20 Company does not have or exercise the incentive to reduce its fuel costs. If anything, it
21 implies the opposite.

22 If the Company's actual fuel costs have gone up, and it chooses not to ask to
23 collect them as part of its new base rates, it is essentially moving these costs from the
24 base revenue amount, which the Commission will decide in this rate case in total, to the
25 fuel clause. Staff's argument therefore might be translated as: "Because GMO moved
26 some fuel costs from their base rate case to their fuel clause, in which they ordinarily

1 collect 95% of their costs, GMO must not care about the total size of its fuel costs.
2 Therefore, GMO must not be minimizing these costs."

3 Whether Staff's argument, translated in this sense, is correct turns on whether the
4 probability of the Company getting a marginal dollar of fuel expense recovered through
5 its rate case is higher or lower than 95%. But what does this have to do with the
6 Company's incentive to keep fuel costs as low as possible? The Company does not
7 make any profits, ever, on its fuel outlays. The Company has not been recovering
8 anywhere near its full test year revenues nor has it earned its allowed ROE in many
9 years. Under these simple circumstances, the Company has absolutely no incentive to
10 do anything other than field its best effort to minimize fuel outlays. Paying more for
11 them only reduces its expected earnings, regardless of whether it has rebased its
12 revenues and allocated more or less to FAC recovery.

13 Another way to illustrate this point is to think about a single fuel purchase
14 decision by the Company's management in between rate cases. At the time fuel
15 purchase decisions are made, the Company does not know whether it will be rebasing its
16 FAC in its next rate case. If so, how could it be altering its behavior to worry less about
17 cost minimization?

18 **Q: Can you explain why GMO elected to not request in this case to re-base the FAC?**

19 A: Yes. The primary reason that we did not request to rebase the FAC in this case was to
20 keep the request to as low an amount as reasonable and still provide a fair return to
21 shareholders. I would like to point out that contrary to Staff's statement, the Company
22 did file to rebase it FAC in the last rate case. It was met with much resistance from the
23 Staff and other parties and ultimately the case was settled and the FAC was not re-based.

1 Had the Company asked to re-based, the Company would have requested a larger
2 rate increase.

3 **Q: If the Company had requested to re-base and the Commission granted the re-base**
4 **amount, what would be the impact?**

5 A: By re-basing the FAC, the rate increase would be larger than the one proposed by the
6 Company. To illustrate with a simple example, suppose that the current rate being
7 charged was 8 cents/kWh and the FAC was 1 cent/kWh, which is recovering costs from
8 the past. Next, assume that the Company filed for a rate increase in which it asked to re-
9 base its rates. In that filing the Company is asking for 1 cent/kWh increase in non-fuel
10 and 1 cent/kWh for fuel and purchase power costs net of off-system sales based on its test
11 year. If the Company were granted the total increase, the Company's rates would go
12 from 8 cents/kWh to 10 cents/kWh. In addition to this new base rate of 10 cents,
13 however, the historic FAC fuel costs would still need to be collected via the FAC.
14 Therefore, customers would pay 11 cents/kWh – the new 10 cent base rate plus the 1
15 cent/ kWh FAC to collect prior uncollected costs.

16 In contrast, if in the same example, the Company does not request re-basing, the
17 new base rate to the customer would be 9 cents/kWh after the increase. The FAC of 1
18 cent/kWh for past uncollected fuel costs would still be 1 cent so total rates would be 10
19 cents rather than 11 cents. The point of this example is that by not requesting to re-base,
20 the customer rate increase is mitigated by over 11 %.

21 Ultimately the Company will eventually recover 95% of its fuel costs, but it won't
22 be at a time when the Company has just finished it largest investment in that last 20 years
23 and is in the process of putting it in rates and hopefully it will be a more positive

1 economic time. In short, the Company's decision not to rebase should be viewed very
2 favorably by the Commission for what it is – an automatic phase-in of its legitimate,
3 prudent costs to moderate rate increases during challenging economic times.

4 **IV. STREET LIGHTING**

5 **Q: Have you reviewed the Direct Testimony provided by Staff concerning street**
6 **lighting?**

7 A: Yes. I have reviewed the testimony of Mr. Scheperle and the associated Staff report.

8 **Q: Please explain the Company's position regarding rate design in this proceeding.**

9 A: As discussed in Staff's testimony, the Company has begun an evaluation of LED street
10 lighting. Our pilot includes field testing and examining 44 fixtures provided by six
11 vendors and installed in five communities within KCP&L and KCP&L-Greater Missouri
12 Operations' service territories. The pilot examines system compatibility, technology
13 performance, validating industry performance claims and efficacy issues. In particular,
14 assuming the lamps perform reliably, the efficacy of the lamps will determine the total
15 energy savings possible. I would highlight the importance of our municipal customers'
16 input during the LED pilot and their anticipated help in crafting any future LED tariff.
17 Also, I would underscore that LED streetlights look to have energy efficiency
18 advantages, but such advantages may not be borne out by the study.

19 **Q: In light of the timing and uncertain outcome of the pilots, what is your view of filing**
20 **an LED tariff are recommended by Staff?**

21 A: Staff's recommendation that the Company complete the evaluation and file a LED street
22 lighting tariff within twelve months of the *Report and Order* in this case is premature and
23 unnecessary. The recommendation is premature in that this limited pilot is scheduled to

1 be completed in spring 2012. At this time we do not know if the scope of this limited
2 pilot will successfully provide enough information for the company to proceed with a
3 LED option. It is very likely that a more extensive pilot may be needed to analyze the
4 full economics of the new technology and provide comfort and confidence to municipal
5 customers that the new technology will work as advertised—so to speak.

6 The Company is strongly committed to working with our municipal customers to
7 incorporate and add energy efficient and cost-effective lighting solutions to our streetlight
8 offerings. Additionally, LED lighting potentially is a solution to concerns regarding light
9 trespass. With that in mind, I believe the recommendation to require a LED tariff filing is
10 unnecessary at this time. After the LED pilots and evaluations are completed, our
11 municipal customers have had opportunity to provide input, and LED lighting is shown to
12 reduce streetlight energy consumption and proven to be cost-effective, then it would
13 seem reasonable and in the best interest of the company and stakeholders to begin the
14 process to amend the Company's tariffs to incorporate LED streetlight options.

15 **Q: Mr. Herdegen addresses LED street lighting in his cost of service rebuttal testimony.**
16 **Are you familiar with his testimony?**

17 A: Yes. He speaks to the Company's plans to include LED street lighting in the Company's
18 tariffs and also offers his concerns of adopting new technology in the absence of a
19 statewide view and policy regarding, not only LED lighting, but its related issues, lower
20 watt lamps, and addressing issues of light trespass and "dark sky" initiatives. Mr.
21 Herdegen provides insight to current customers' preferences regarding street lighting and
22 addresses the process for LED lighting to be incorporated into the tariffs. He wants to
23 ensure the process includes legislative action to establish a statewide policy and

1 rulemaking to allow other stakeholders, such as environmentalist, law enforcement,
2 insurance companies, municipal and cooperative electric providers, dark sky proponents,
3 customers, and others, have opportunity to offer their view and help craft statewide rules
4 concerning LED and other lighting options. In anticipation of that process, KCP&L has
5 embarked on LED pilot projects to collect data.

6 **V. OTHER TARIFF CHANGES**

7 **Q: Have you reviewed the Direct Testimony provided by Staff concerning the**
8 **Company's other proposed tariff changes?**

9 A: Yes. I have reviewed the testimony of Mr. Scheperle and the associated Staff report.
10 Staff combines all its recommendations into section V of its report, supporting the
11 Company's request to change two proposed definitions of Unauthorized Use and
12 Tampering, approving changing the partial payment rule as proposed by the Company
13 and approve the addition of a minimum charge to reconnect a service that had been
14 subject to tampering. Additionally, Staff recommends changing three tariffs to clarify
15 some of the descriptions.

16 **Q: Please explain the Company's position regarding Staff's recommendation.**

17 A: The Company supports the recommendations offered by Staff.

18 **Q: Does this conclude your testimony?**

19 A: Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of KCP&L Greater Missouri Operations Company to Modify Its Electric Tariffs to Effectuate a Rate Increase	)))	Docket No. ER-2010-0356

AFFIDAVIT OF TIM M. RUSH

STATE OF MISSOURI)
) **ss**
COUNTY OF JACKSON)

Tim M. Rush, being first duly sworn on his oath, states:

1. My name is Tim M. Rush. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as Director, Regulatory Affairs.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of KCP&L Greater Missouri Operations Company consisting of thirty (30) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Tim M. Rush

Subscribed and sworn before me this 17th day of December, 2010.

Notary Public

My commission expires: Feb. 4, 2011