


# Fleming-Mason Energy

A Touchstone Energy Cooperative 

March 19, 2009

Mr. Jeff Derouen  
Executive Director  
Kentucky Public Service Commission  
211 Sower Boulevard  
Frankfort, KY 40602-0615

RECEIVED  
MAR 20 2009  
PUBLIC SERVICE  
COMMISSION

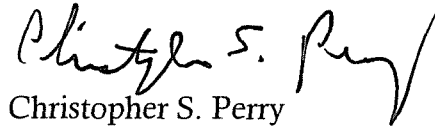
RE: Case 2008-00408

Dear Mr. Derouen,

I want to update my testimony submitted in the Case 2008-00408. Please accept into the record the update. In my original testimony, some of the financial data was not disclosed. After reviewing the cost of service study and previously submitted information to the Commission, I believe that there is no reason to exclude any information.

Thank you for assistance in this case.

Sincerely,



Christopher S. Perry  
President and CEO

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

**In re the Matter of:**

**CONSIDERATION OF THE NEW FEDERAL )**  
**STANDARDS OF THE ENERGY ) CASE NO. 2008-00408**  
**INDEPENDENCE AND SECURITY ACT OF )**  
**2007 )**

**RECEIVED**

**MAR 9 9 2008**

**PUBLIC SERVICE  
COMMISSION**

**TESTIMONY OF**  
**CHRISTOPHER S. PERRY**  
**PRESIDENT AND CHIEF EXECUTIVE OFFICER**  
**FLEMING-MASON ENERGY**

**Filed: December 11, 2008**

**I. INTRODUCTION**

1 **Q. Please state your name, business address and occupation.**

2 A. My name is Chris Perry. I am the President and Chief Executive Officer of Fleming-  
3 Mason Energy located at RR-2 Elizaville Rd., Flemingsburg, Kentucky 41041.

4 **Q. Please state your education and professional experience.**

5 A. My education consists of a Bachelor of Science in Electrical Engineering degree from  
6 the University of Kentucky and graduate coursework toward a Master's in Business  
7 Administration degree from Embry-Riddle Aeronautical University. I have worked  
8 in the cooperative program for over 15 years for three cooperatives including Nolin  
9 RECC in Elizabethtown, Kentucky and for one of the largest cooperatives in the  
10 country, Sumter Electric, in Sumterville, Florida. I have worked for Fleming-Mason  
11 Energy since 2003. Before becoming the President and CEO in April of 2007, I was  
12 the Manager of Engineering.

13 **Q. Please provide a brief description of your duties at Fleming-Mason.**

14 A. As President and CEO, I am responsible for the electric operation and financial  
15 control of the organization. I am also responsible to the Fleming-Mason Energy  
16 Board of Directors and assure them that Fleming-Mason Energy is complying with all  
17 rules and regulations set forth by the Rural Utilities Service, Kentucky Public Service  
18 Commission, and all other regulatory bodies.

19 **Q. What is the purpose of your testimony?**

20 A. The purpose of my testimony is to provide comments regarding the retail rate design  
21 modifications that are necessary to promote energy efficiency investments. As a  
22 distribution cooperative, Fleming-Mason is both concerned about and well positioned

1 to address this issue. With regard to the other three issues on which the Commission  
2 seeks comments, Fleming-Mason adopts and supports the comments filed by East  
3 Kentucky Power Cooperative in this proceeding.

4 **Q. Please summarize your testimony.**

5 A. To create the right retail rate environment for promoting energy efficiency  
6 investments, the Commission needs to adhere to the rate making principle that fixed  
7 costs should be recovered through fixed charges and variable costs should be  
8 recovered through variable charges. For most distribution cooperatives, following this  
9 principle would result in higher customer charges, higher demand charges, and lower  
10 energy charges.

11 **Q. Please describe Fleming-Mason Energy.**

12 A. Fleming-Mason Energy is an electric distribution cooperative, owned by its members,  
13 and operated for them on a not-for-profit basis. Fleming-Mason serves more than  
14 23,000 members in our eight county service area. Fleming-Mason maintains over  
15 3,400 miles of line in the counties of Bath, Bracken, Fleming, Lewis, Mason,  
16 Nicholas, Robertson and Rowan. With the financial pressures that our members are  
17 facing today as a result of escalating energy and commodity prices, Fleming-Mason  
18 wants to help our customers conserve energy and manage their energy bills while  
19 providing reliable service at the lowest possible price.

20 **Q. Do current retail rate designs provide any disincentives for Fleming-Mason to**  
21 **aggressively pursue energy conservation and energy efficiency efforts with its**  
22 **customers?**

23 A. Yes. Fleming-Mason's current retail rate design does not align the interests of the

1 cooperative and its customers with respect to energy conservation and energy  
2 efficiency. Fleming-Mason's current residential customer charge is \$9.75 per  
3 customer per month which is well below the \$22.79 indicated by its most recent cost  
4 of service. This \$9.75 monthly charge does not even cover Fleming-Mason's  
5 customer related costs of \$19.93 per customer per month let alone any margins.  
6 Under its current rate design, Fleming-Mason collects all of its margins and a  
7 significant portion of its customer related fixed costs through an energy charge  
8 assessed on a kWh basis. Thus, any reduction in sales due to energy conservation or  
9 energy efficiency results in the cooperative not recovering fixed cost and margin,  
10 which financially harms the cooperative. It is not reasonable to expect Fleming-  
11 Mason to aggressively pursue energy conservation and energy efficiency when every  
12 reduction in sales has a negative financial impact on Fleming-Mason. This link  
13 between sales and fixed cost and margin recovery is referred to in the electric utility  
14 industry as the "throughput incentive".

15 **Q. Please explain the "throughput incentive".**

16 A. Between rate cases, utilities have a financial incentive to increase retail sales of  
17 electricity relative to historic levels that were used for calculating their base rates.  
18 This incentive exists because there is usually significant incremental fixed cost and  
19 margin recovery on incremental sales. For sales above the historic levels that were  
20 used for calculating its base rates, all revenue above the variable cost of producing the  
21 incremental kWh would be incremental revenue for the utility. This incentive for  
22 utilities to maximize the "throughput" of electricity across their wires in an attempt to  
23 increase fixed cost and margin recovery is referred to as the "throughput incentive".

1 Similarly, utility profits decline when sales are below the historic levels that were  
2 used for calculating their base rates, which could result from energy conservation and  
3 energy efficiency. Every kWh lost as a result of demand side management programs  
4 reduces profits, regardless how cheap the demand side management. The effect of this  
5 throughput disincentive is greater for distribution-only utilities, such as rural electric  
6 cooperatives, because the revenue impact of electricity sales reduction is  
7 disproportionately larger for utilities without generation resources. It is critical to  
8 address this throughput incentive if regulators and customers want utilities to become  
9 actively involved in energy conservation and energy efficiency programs.

10 **Q. How can this “throughput incentive” be mitigated for rural electric**  
11 **cooperatives?**

12 A. Probably the easiest way for a rural electric cooperative to mitigate the throughput  
13 incentive is to allow it to increase its customer charge to a level that is justified  
14 based on cost of service. This would assure a revenue stream that flows into the  
15 cooperative regularly and that is not linked to the level of sales. One result of such a  
16 change is that the energy charge would be reduced as fixed cost and margin recovery  
17 was removed from the customer charge. The straight fixed variable rate design that is  
18 common in the natural gas industry takes this to the extreme with all of a utility’s  
19 fixed cost recovered through a monthly customer charge. This completely breaks the  
20 link between the recovery of fixed cost and margins and the level of kWh sales, as  
21 there are no fixed cost or margin recovery in the energy charge assessed on a kWh  
22 basis.

23 **Q. What costs are typically classified as customer-related in a cost of service study**

1           **and should be recovered through the customer charge?**

2    A.    The customer charge recovers the cost of the minimum amount of equipment that the  
3           cooperative must install to provide a customer with access to the electric grid.  
4           Without this minimum amount of equipment, customers would not be able to receive  
5           electric service. Unfortunately, the cost of the poles, wire, transformers, service  
6           drops, meters and substations necessary to provide a customer with access to the  
7           electric grid are not cheap. For example, the 15 kVa transformer that is used for most  
8           residential customers costs about \$550 installed. A mile of single phase distribution  
9           line costs about \$30,000 per mile, which includes both the poles and the wire. On  
10          average, the Fleming-Mason has about \$1,883 per residential customer invested in the  
11          distribution facilities necessary to provide a customer with electric service. These  
12          represent fixed costs to the cooperative; that is costs that do not change regardless of  
13          the amount of electric energy purchased by customers. So if customers use less  
14          electricity, either because they have taken steps to conserve energy or because they  
15          went to Florida on vacation, these costs to the cooperative do not change and must be  
16          recovered for the cooperative to remain financially sound.

17   **Q.    In a cost of service study, why are the fixed costs of a cooperative's distribution**  
18           **system allocated between demand-related and customer related components?**

19    A.    In order to be as fair as possible to all customers, the fixed cost of a cooperative's  
20          distribution system is divided into two components: 1) customer-related costs and 2)  
21          demand-related costs. The portion classified as customer-related cost is the portion of the  
22          fixed costs of the distribution system that is size invariant. This size invariant portion of  
23          the costs is usually determined using the zero intercept approach or an engineering

1 estimate. Costs that vary with the load carrying capability of the distribution facilities  
2 should be allocated on the basis of demand.

3 Costs that do not vary with the load carrying capability of the distribution facilities  
4 are fixed costs that exist irrespective of what size of facility is installed. These costs  
5 are present due to the fact that a customer is being served and will not increase or  
6 decrease with the load requirements of that customer. Using conductor as an example,  
7 there is a level of fixed production cost associated with every conductor size. That  
8 fixed cost is best allocated on the basis of customer months because it is caused by  
9 the existence of a customer, not by the existence of demand. These costs that do not  
10 vary with the size of the equipment are properly classified as customer costs and  
11 allocated based on the number of customers in a class.

12 The amount of the cooperative's distribution system costs that are collected through  
13 the customer charge is based on the minimum amount of equipment that each  
14 customer must have in place to provide access to the electric grid. However, not all  
15 customers can get by with a minimum system, and the distribution costs in excess of  
16 the minimum system are collected from customers using a charge per kWh. This split  
17 of distribution system costs is done to be as fair as possible to customers who use  
18 very little electric energy as well as those who use a lot. Since all customers need at  
19 least the minimum amount of equipment necessary to provide a customer with access  
20 to the electric grid, all customers are assessed the cost of installing and maintaining  
21 this minimum system through the monthly customer charge. Customers that need  
22 more than a minimum system pay for their heavier usage through a kWh charge. By  
23 dividing the distribution system costs in this way, all customers are paying their fair



1 share for the facilities that they need.

2 **Q. How much of a typical customer's bill is for the cooperative's distribution**  
3 **facilities?**

4 A. Based on the last cost of service study that the cooperative did, about 20% of a typical  
5 customer's bill is for the cooperative's distribution facilities and about 80% is for the  
6 energy that the cooperative purchases from its supplier. Thus, reducing customer  
7 usage through energy conservation and energy efficiency programs has the potential  
8 to generate significant energy bill reductions for customers. Furthermore, with  
9 increases in the cost of copper, steel, cement, coal and natural gas, both the cost of the  
10 generating plants and transmission lines and the cost of the fuel for producing electric  
11 energy are likely to increase in the future. With these expected increases in the cost of  
12 purchased power, energy conservation and energy efficiency would benefit both the  
13 cooperative and its customers, and Fleming-Mason would be willing to aggressively  
14 pursue , energy conservation and energy efficiency if it were not harmed financially  
15 be doing so.

16 **Q. Why would reducing the customer charge and recovering these costs through a**  
17 **kWh charge cause financial problems for the cooperative and result in more**  
18 **variable energy bills for customers?**

19 A. If some of the costs of the minimum system necessary to provide a customer with  
20 access to the electric grid are recovered through a kWh charge rather than through the  
21 customer charge, customers who use a small amount of electric energy would not pay  
22 the costs that they impose on the system and would receive a subsidy from customers  
23 who use a lot of electric energy. With these fixed costs recovered through the kWh

1 charge, the cooperative would recover more fixed cost than it actually needed when  
2 weather was extremely hot or cold and kWh sales were high. The cooperative would  
3 recover less fixed cost than it needed when weather was mild and kWh sales were  
4 low. This would result in customer energy bills being higher than necessary when  
5 weather was extreme and lower than necessary when weather was mild. With a low  
6 customer charge, the cooperative is betting on extreme weather, and the cooperative  
7 wins and the customer loses when extreme weather actually occurs. Rather than  
8 making bets on weather, a better outcome for both the cooperative and for customers  
9 is for the cooperative to recover these fixed costs through a fixed monthly charge that  
10 does not vary with kWh sales and with weather.

11 **Q. Would recovering the cost of the minimum system necessary to provide a**  
12 **customer with access to the electric grid through a monthly customer charge**  
13 **provide the right environment for energy conservation?**

14 A. Yes. If a cooperative recovers a significant amount of its fixed costs through an  
15 energy charge on each kWh sold rather than through a monthly customer charge,  
16 energy conservation would result in reduced energy sales and in some of these fixed  
17 costs not being recovered by the cooperative. Thus, reduced sales resulting from  
18 energy conservation would harm the cooperative financially and reduce the  
19 cooperative's enthusiasm for assisting customers with energy conservation efforts.  
20 However, if these fixed costs are recovered through a monthly customer charge, the  
21 cooperative would continue to recover these fixed costs regardless of the level of  
22 kWh sales, and the cooperative could get much more aggressive in assisting  
23 customers with energy conservation efforts without harming itself financially.

1 A rate where the fixed costs and margin of the distribution cooperative are recovered  
2 through a fixed charge on the member's bill encourages the cooperative to put the  
3 goal of energy efficiency and load reduction as a priority. This rate design would  
4 align the goals of all of the parties and would result in the Commission, Attorney  
5 General, Sierra Club, the Governor's Energy plan, the members, and the distribution  
6 cooperative will working toward the same goal. That goal is to reduce energy usage,  
7 carbon emissions, and ultimately the energy bill of the member.

8 **Q. Shouldn't the customer charges for all utilities in Kentucky be about the same?**

9 A. No. Rural electric cooperatives have much fewer customers per mile of line and  
10 cannot spread fixed distribution costs over as many customers as an investor-owned  
11 cooperative. For example, Fleming-Mason currently has about 6.7 customers per  
12 mile of line while Kentucky Utilities has about 35.4 customers per mile of line. If a  
13 mile of single phase distribution line costs about \$30,000 to install, this mile of line  
14 would represent a cost of \$4,477 per customer for Fleming-Mason and only \$847 for  
15 Kentucky Utilities. Similarly, in a rural area, it is difficult for a transformer to serve  
16 more than a single customer, while in an urban area a transformer could serve from 4  
17 or more customers. These differences in ability to spread fixed costs result in much  
18 higher customer related costs for distribution cooperatives compared to investor-  
19 owned utilities and the resulting customer charges could be very different.

20 **Q. Would a lower customer charge benefit fixed and low income customers?**

21 A. Based on our experience, a lower customer charge would not benefit most fixed and low  
22 income customers. For fixed and low income customers to benefit from a lower customer  
23 charge and higher energy charge, these customers would need to have an energy usage

1 that is significantly lower than the class average. Generally, this is not the case for low  
2 income customers. The housing stock in which many low income customers are living is  
3 relatively inefficient from an energy usage standpoint, so their energy usage is frequently  
4 above the class average. The inefficient energy usage of the dwelling in which they live  
5 has typically resulted in the price of the dwelling being discounted to a level that low  
6 income customers can afford. For fixed income customers, it is our experience that,  
7 because they have a stock of appliances similar to other customers and are frequently  
8 home all day, they generally have usage levels in the neighborhood of the class average  
9 and would not significantly benefit from such a change.

10 In the Fleming-Mason Energy service territory, twenty percent of our members are  
11 below the poverty level and they struggle to make ends meet monthly. When you  
12 examine the usage of our low-income members, you see that these members have  
13 bills that are higher than the average customer. There are a couple of reasons for this.  
14 First, these members live in homes or manufactured homes that are typically older  
15 than the average. Approximately 75% of our members live in homes that are older  
16 than 10 years. These homes are poorly insulated and have appliances that do not  
17 meet Energy Star standards.

18 **Q. Who are the low usage customers who would benefit from a lower customer charge**  
19 **and a higher energy charge?**

20 A. For most rural electric cooperatives, their low-usage customers are loads like boat docks,  
21 garages, electric fences, stock tanks, vacation homes, hunting camps, fishing camps and  
22 services run to barns in case they might be needed. All of these loads typically consume  
23 very few kilowatt hours during the course of a year and the usage is sporadic. However,

1 even though kWh sales may be low to these customers, the cooperative still incurs  
2 significant fixed costs in installing the minimum system requirements necessary to serve  
3 these loads. Furthermore, these loads usually are not located near roads and existing  
4 distribution lines and may cost more than the average minimum system. A lower  
5 customer charge and a higher energy charge would result in these low-usage customers  
6 being subsidized by other cooperative customers who have above-average usage. Such a  
7 rate structure would send a signal that it is relatively inexpensive to provide the physical  
8 equipment necessary to provide service to these low-usage customers, and this is  
9 definitely not the case in rural areas.

10 **Q. Do you believe that the Commission should also explore the use of time of use rates**  
11 **in this proceeding?**

12 A. Yes. About 25% of the cost of purchased power is for recovering the cost of our  
13 supplier's electric generating plants and transmission lines and about 75% of the cost of  
14 purchased power is for the fuel used to produce the electric energy that customers  
15 consume. By loading the purchased power demand costs into an adder that is applied to  
16 on-peak energy sales, the cooperative could provide an incentive for customers to shift  
17 usage to time periods where it is less costly to serve them. This would provide customers  
18 with control over their energy bills and incent them to pursue changes in usage patterns  
19 that would drive costs out of the business.

20 **Q. Please describe Fleming-Mason's efforts in the energy conservation and energy**  
21 **efficiency areas.**

22 A. Fleming-Mason Energy works hard to help our members become more energy  
23 efficient. We have given out thousands of compact fluorescent light bulbs (CFLs),

1 performed energy audits over the entire system, and offered rebates on insulation and  
2 geothermal units. Recently, we have started a partnership with one of the industrial  
3 customers in Mason County to educate and provide energy efficient equipment to  
4 their employees. We are committed to helping our members meet the energy  
5 challenges of the future.

6 The problem with many of the programs and incentives that we offer is that many  
7 customers cannot fully take advantage of them. The problem is that many members  
8 do not have the disposable cash to fully implement them in their homes. For these  
9 programs to be fully utilized, the Commission needs to consider creating rate designs  
10 that allow cooperatives to have a mechanism to fund these programs. There are a  
11 couple of possible solutions. One, the Commission could allow a charge to be placed  
12 on the bill similar to the DSM surcharge. This charge of \$2.00 per meter would allow  
13 the cooperative to have funds available to make investments. For accountability, the  
14 Commission should review the investments and determine the appropriate use of the  
15 money each year.

16 A second method that may be used would be for the Commission to allow a higher  
17 TIER to be recovered by the cooperative. In our recent rate case, we agreed to a  
18 TIER of approximately 2.0. If a TIER of 2.5 were recovered, then the additional  
19 funds could be used for the efficiency investments. In either instance, the cooperative  
20 will make the additional investments with the members to reduce usage. All parties  
21 benefit from this scenario. Members' bills will be reduced, emissions are reduced,  
22 and the cooperative does not start a cycle of decreased sales leading to increased rates  
23 because rates are recovered through fixed charges.

1 **Q. What are your conclusions regarding the Commission's investigation in this**  
2 **proceeding?**

3 A. Fleming-Mason Energy is very supportive of the Commission in this investigation. I  
4 believe that the cooperatives have a great deal to bring to the table. We want to help our  
5 members use energy efficiently while at the same time reducing their costs. We look  
6 forward to working with the Commission in implementing rate designs that make energy  
7 conservation and energy efficiency a win-win proposition for our customers and for the  
8 cooperative.

9 **Q. Does this conclude your testimony?**

10 A. Yes.