

Exhibit No.:  
 Issues: Residential Rate Design; Energy Efficiency  
 Witness: Martin Hyman  
 Sponsoring Party: Missouri Department of Economic Development – Division of Energy  
 Type of Exhibit: Direct Testimony  
 Case Nos.: ER-2016-0023

FILED  
 August 11, 2016  
 Data Center  
 Missouri Public  
 Service Commission

**MISSOURI PUBLIC SERVICE COMMISSION**

**THE EMPIRE DISTRICT ELECTRIC COMPANY**

**CASE NO. ER-2016-0023**

**DIRECT TESTIMONY**

**OF**

**MARTIN R. HYMAN**

**ON**

**BEHALF OF**

**MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT**

**DVISION OF ENERGY**

Jefferson City, Missouri

April 8, 2016

(Rate Design)

DE Exhibit No. 1  
 Date 6-02-16 Reporter XF  
 File No. ER-2016-0023

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

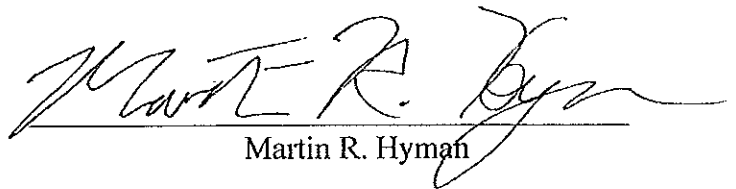
In the Matter of The Empire )  
District Electric Company's Request ) ER-2016-0023  
for Authority to Implement a General Rate )  
Rate Increase for Electric Service )

AFFIDAVIT OF MARTIN HYMAN


STATE OF MISSOURI )  
 ) ss  
COUNTY OF COLE )

Martin R. Hyman, of lawful age, being duly sworn on his oath, deposes and states:

1. My name is Martin R. Hyman. I work in the City of Jefferson, Missouri, and I am employed by the Missouri Department of Economic Development as a Planner III, Division of Energy.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of the Missouri Department of Economic Development – Division of Energy.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge.

  
Martin R. Hyman

Subscribed and sworn to before me this 8<sup>th</sup> day of April, 2016.

  
Notary Public

My commission expires:

MELISSA ANN ADAMS  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: March 09, 2019  
Commission Number: 15633820



TABLE OF CONTENTS

I. INTRODUCTION .....	1
II. PURPOSE AND SUMMARY OF TESTIMONY .....	2
III. RESPONSE TO COMPANY’S RATE DESIGN PROPOSAL .....	3
A. EMPIRE PROPOSAL .....	3
B. DIVISION OF ENERGY RESPONSE .....	7
IV. BILL FREQUENCY AND BILL IMPACT ANALYSES .....	17
A. BILL FREQUENCY ANALYSIS.....	17
B. BILL IMPACT ANALYSIS OF COMPANY’S PROPOSAL.....	20
V. RESIDENTIAL VOLUMETRIC RATE DESIGN .....	24
VI. DEMAND-SIDE MANAGEMENT .....	29
VII. CONCLUSIONS .....	33

1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Martin R. Hyman. My business address is 301 West High Street, Suite 720,  
4 PO Box 1766, Jefferson City, Missouri 65102.

5 **Q. By whom and in what capacity are you employed?**

6 A. I am employed by the Missouri Department of Economic Development – Division of  
7 Energy (“DE”) as a Planner III.

8 **Q. Please describe your educational background and employment experience.**

9 A. In 2011, I graduated from the School of Public and Environmental Affairs at Indiana  
10 University in Bloomington with a Master of Public Affairs and a Master of Science in  
11 Environmental Science. There, I worked as a graduate assistant, primarily investigating  
12 issues surrounding energy-related funding under the American Recovery and  
13 Reinvestment Act of 2009. I also worked as a teaching assistant in graduate school and  
14 interned at the White House Council on Environmental Quality in the summer of 2011. I  
15 began employment with DE in September, 2014. Prior to that, I worked as a contractor  
16 for the U.S. Environmental Protection Agency to coordinate intra-agency modeling  
17 discussions.

18 **Q. Have you previously filed testimony before the Missouri Public Service Commission**  
19 **(“Commission”) on behalf of DE or any other party?**

20 A. Yes. I submitted testimony in EO-2015-0055 on behalf of DE regarding Union Electric  
21 Company d/b/a Ameren Missouri’s (“Ameren Missouri”) proposed Cycle II portfolio  
22 under the Missouri Energy Efficiency Investment Act. I also submitted testimony on  
23 behalf of DE in ER-2014-0370 regarding Kansas City Power & Light Company’s

1 (“KCP&L”) proposed changes to its customer charges and time-differentiated rates, as  
2 well as testimony regarding that company’s proposals for the Clean Charge Network. In  
3 WR-2015-0301 and SR-2015-0302, I submitted testimony on behalf of DE regarding  
4 Missouri-American Water Company’s and the Commission Staff’s (“Staff”) rate design  
5 proposals and in order to propose a demand-side efficiency mechanism. I provided “live”  
6 testimony on behalf of DE in EA-2015-0256 in support of KCP&L Greater Missouri  
7 Operations Company’s (“GMO”) application for a Certificate of Convenience and  
8 Necessity to construct its Greenwood solar facility.

9 **II. PURPOSE AND SUMMARY OF TESTIMONY**

10 **Q. What is the purpose of your Direct Testimony (Rate Design) in this proceeding?**

11 A. The purpose of my Direct Rate Design Testimony is to express DE’s opposition to the  
12 residential rate design proposal of The Empire District Electric Company (“Empire” or  
13 “Company”), since the proposal is neither grounded in a demonstration of cost causation  
14 nor based on principles of equity, efficiency, gradualism, or the avoidance of “rate  
15 shock.” DE proposes that the Commission reject the Company’s request to increase the  
16 residential customer charge. I affirm DE’s position with residential bill frequency and bill  
17 impact analyses.

18 Additionally, DE recommends that the Commission order a working docket in which the  
19 parties to this case can discuss the implementation of revised block rate designs for  
20 Empire’s residential customers. Should the Commission wish to move towards the  
21 reduction of the differential between the residential winter tail and first blocks, DE could  
22 support an adjustment of the tail block rate of up to 10 percent of the way towards the  
23 initial block. Finally, DE recommends that the Company be encouraged to file an

1 application for a demand-side management (“DSM”) program portfolio under the  
2 Missouri Energy Efficiency Investment Act (“MEEIA”). If the Company does not have a  
3 MEEIA approved prior to the conclusion of this rate case, Empire should be required to  
4 continue its current DSM portfolio at current funding levels until the Company receives  
5 approval for a MEEIA portfolio. Although Empire has not indicated in its revised tariffs  
6 that it wishes to discontinue its DSM programs in this case, it has made such an  
7 indication in its recently filed triennial Integrated Resource Plan (“IRP”) (EO-2016-  
8 0223); DE therefore offers its DSM recommendation to ensure the availability of  
9 programs which benefit customers. DE also supports requiring Empire to correct the  
10 outdated and incorrect information identified by Staff in the Company’s DSM tariffs.

11 **III. RESPONSE TO COMPANY’S RATE DESIGN PROPOSAL**

12 **A. EMPIRE PROPOSAL**

13 **Q. What principles should be considered when evaluating the Company’s residential**  
14 **rate design proposal?**

15 **A.** Rate design should take into consideration the cost to serve a particular class, the  
16 causation of costs, the promotion of efficient energy use, gradualism, and the avoidance  
17 of “rate shock.” In general, cost of service and cost causation should be used as  
18 guidelines in determining rates, but should not override the other considerations  
19 mentioned. Additionally, it should be noted that “fixed costs” for a regulated utility in a  
20 cost-of-service jurisdiction do not correspond perfectly to fixed accounting costs.  
21 Consequently, customer charges should only include dedicated customer-related costs –  
22 i.e., those costs incremental to serving an additional customer and not to providing an  
23 additional kilowatt-hour (“kWh”) of electricity.

1 **Q. How does the Company propose to allocate revenues between classes in this general**  
2 **rate case (ER-2016-0023)?**

3 A. Empire starts with the Commission's allocations from the prior general rate case (ER-  
4 2014-0351) but makes several significant modifications, including a shift from its special  
5 service customer to the residential class.<sup>1</sup> This shift is partly responsible for the 9.57  
6 percent revenue increase<sup>2</sup> to the residential class, a change which is well above the  
7 overall request of 7.3 percent.<sup>3</sup>

8 **Q. How does Empire propose to collect revenues from its residential customers?**

9 A. Except for the small commercial class, the Company proposes to focus its rate increase  
10 on fixed billing components, such as the residential customer charge.<sup>4</sup>

11 **Q. Why did the Company propose this shift in rate design?**

12 A. Empire witness Scott W. Keith states that the shift:

13 ... will move Empire's rates toward cost of service, which includes a substantial  
14 portion of costs that are fixed, not variable; improve the price signal to the  
15 customers, which will enable our customers to make more efficient decisions  
16 concerning usage and energy efficiency; and lessen the impact on Empire's lower

---

<sup>1</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Direct Testimony of Nathaniel W. Hackney on Behalf of The Empire District Electric Company, Direct Testimony of W. Scott Keith on Behalf of The Empire District Electric Company, October 16, 2015, page 8, lines 3-14.

<sup>2</sup> *Ibid*, unlabeled table.

<sup>3</sup> *Ibid*, page 4, lines 13-15.

<sup>4</sup> *Ibid*, page 9, lines 1-8.

1 income consumers, who on the average use more than the average customer  
2 during the winter months.<sup>5</sup>

3 He also indicates that this type of rate design, "... moves toward the decoupling of sales  
4 volume and revenue production," even if it is not decoupling *per se*.<sup>6</sup>

5 **Q. How did Empire determine the residential customer charge?**

6 A. The Company not only increased the residential customer charge by the revenue request  
7 previously described, but added the 6.02 percent increase granted in the previous rate  
8 case (ER-2014-0351).<sup>7</sup> This would raise the residential customer charge from \$12.52 to  
9 \$14.47.<sup>8</sup> Mr. Keith claims that this adjustment is appropriate because the Stipulation in  
10 ER-2014-0351 – to which the Company agreed – contradicted class cost of service  
11 ("CCOS") studies; the costs in the present case (ER-2016-0023) are "fixed;" and  
12 residential customers with large usage (including his definition of low income customers)  
13 will benefit from the increase.

14 **Q. Did the Company also propose decreases to its residential energy charges?**

15 A. No. In comparing Empire's current<sup>9</sup> and proposed<sup>10</sup> residential tariffs, it is evident that  
16 the Company increased its residential energy charges between approximately 8.97 and  
17 8.98 percent. This is below the proposed increase to the residential customer charge and,  
18 on a revenue-neutral basis, indicates a shift towards revenue collection through the  
19 customer charge for the residential class.

---

<sup>5</sup> *Ibid*, lines 8-13.

<sup>6</sup> *Ibid*, page 10, lines 1-7.

<sup>7</sup> *Ibid*, lines 8-13.

<sup>8</sup> *Ibid*, page 9, unlabeled table.

<sup>9</sup> Missouri Public Service Commission Tariff No. YE-2016-0008, The Empire District Electric Company, Schedule RG, July 26, 2015, Sec. 1, Sheet No. 1.

<sup>10</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Schedule RG, October 16, 2015, Sec. 1, Sheet No. 1.



1 **Q. How high is Empire’s residential customer charge in comparison to other investor-**  
2 **owned utilities in Missouri?**

3 A. Empire already has the highest customer charge of Missouri’s investor-owned electric  
4 utilities. Ameren Missouri’s residential customer charges stand at \$8.00,<sup>11</sup> KCP&L’s  
5 customer charge recently reached \$11.88,<sup>12</sup> and the customer charges of GMO are, as of  
6 the time of filing, \$9.54 for L&P territory customers<sup>13</sup> and \$10.43 for MPS customers.<sup>14</sup>

7 **Q. Please summarize the residential rate design proposal of the Company.**

8 A. The Company’s residential rate design proposal is summarized in Tables 1a through 1c  
9 below.

10 **Table 1a. Current residential rates for Empire customers.**<sup>15</sup>

Charge Type	Winter	Summer
Customer Charge	\$12.52	
Volumetric Charge (Block 1)	\$0.12254	\$0.12254
Volumetric Charge (Block 2)	\$0.09961	\$0.12254

<sup>11</sup> Missouri Public Service Commission Tariff No. YE-2015-0325, Union Electric Company d/b/a Ameren Missouri, Service Classification No. 1(M) – Residential Service Rate, May 30, 2015, Sheet No. 54.

<sup>12</sup> Missouri Public Service Commission Tariff No. YE-2016-0078, Kansas City Power & Light Company, Schedule R, September 29, 2015, Sheet No. 5A.

<sup>13</sup> Missouri Public Service Commission Tariff No. YE-2015-0204, KCP&L Greater Missouri Operations Company, Residential Service – General Use (Electric), December 1, 2014, Sheet No. 18.

<sup>14</sup> Missouri Public Service Commission Tariff No. YE-2013-0326, KCP&L Greater Missouri Operations Company, Residential Service (Electric), January 26, 2013, Sheet No. 51.

<sup>15</sup> Missouri Public Service Commission Tariff No. YE-2016-0008, The Empire District Electric Company, Schedule RG, July 26, 2015, Sec. 1, Sheet No. 1.

1 **Table 1b. Company's proposed residential rates.<sup>16</sup>**

Charge Type	Winter	Summer
Customer Charge	\$14.47	
Volumetric Charge (Block 1)	\$0.13353	\$0.13353
Volumetric Charge (Block 2)	\$0.10855	\$0.13353

2 **Table 1c. Company's proposed change in residential rates.**

Charge Type	Winter	Summer
Customer Charge	15.58%	
Volumetric Charge (Block 1)	8.97%	8.97%
Volumetric Charge (Block 2)	8.98%	8.97%

3 **B. DIVISION OF ENERGY RESPONSE**

4 **Q. Do you agree with Mr. Keith that the proposed residential rate design will move**  
5 **rates toward cost of service?**

6 **A.** No. A CCOS study was not conducted by the Company specifically for this case.<sup>17</sup>

7 Absent such a study tying the costs and expenses in this case to the particular cost  
8 causers, it is inappropriate for Empire to propose a new rate design which shifts revenue  
9 collection towards the customer charge. Such a shift allocates the energy- and capacity-  
10 related costs underlying this case out of the Company's volumetric charges despite cost  
11 allocation principles. The main driver behind Empire's case filing – the conversion of the  
12 Riverton 12 electric generating unit to a combined cycle plant<sup>18</sup> – does not represent a  
13 dedicated customer-related cost, so the associated costs and expenses should not be  
14 allocated to the customer charges. The conversion relates to costs best allocated on  
15 energy- and demand-related factors, which, as a result, are most appropriately recovered

<sup>16</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Schedule RG, October 16, 2015, Sheet No. 1.

<sup>17</sup> Company Response to Office of the Public Counsel Data Request DR 5045, Part b.

<sup>18</sup> Keith, page 4, lines 7-8.

1 through the Company's volumetric rates; customers should pay for capacity-related costs  
2 through variable, not fixed, billing components.

3 **Q. What are examples of the customer-related costs which should be included in the**  
4 **customer charge?**

5 A. The types of dedicated customer-related costs which should be included in the customer  
6 charge include postage, meters, meter reading, line drops, and the portion of operations  
7 and maintenance expenses associated with maintaining meters and line drops; some  
8 analysts choose to include sales-related expenses as well, although there is value in  
9 minimizing the customer charge by not including these items.<sup>19</sup> Customer costs should  
10 not include generation or transmission plant, nor should they generally include  
11 distribution plant. In short, customer charges should only include those dedicated  
12 customer-related costs which vary incrementally and directly with the number of  
13 customers in a class.

14 **Q. Should "joint and common costs" be allocated to customer charges?**

15 A. Generally, no. The National Association of Regulatory Utility Commissioners' Electric  
16 Utility Cost Allocation Manual defines joint and common costs as the following:

17 Joint costs occur when the provision of one service is an automatic by-product of  
18 the production of another service. Common costs are incurred when an entity  
19 produces several services using the same facilities or inputs. ... In the electric  
20 industry, the most common occurrence of joint costs is the time jointness of the  
21 costs of production where the capacity installed to serve peak demands is also

---

<sup>19</sup> See National Association of Regulatory Utility Commissioners (1992), Electric Utility Cost Allocation Manual, Washington, D.C., pages 103-104.

1 available to serve demands at other times of the day or year. Overhead expenses  
2 such as the president's salary or the accounting and legal expenses are examples  
3 of costs that are common to all of the separate services offered by the utility.<sup>20</sup>

4 The manual further states:

5 In an embedded cost study the joint and common costs identified in the test year  
6 are allocated either on the basis of the overall ratios of those costs that have been  
7 directly assigned, or by a series of allocators that best reflect cost causation  
8 principles such as labor, wages or plant ratios, or by a detailed analysis of each  
9 account to determine beneficiality.<sup>21</sup>

10 Joint and common costs are not directly related to dedicated customer-related facilities  
11 and should not be allocated to customer charges.

12 **Q. Does setting a customer charge only at the level needed to recover those dedicated**  
13 **customer-related costs mentioned above follow the principle of cost causation?**

14 **A.** Yes. A customer that uses more electricity places more demands on a utility's generation,  
15 transmission and distribution systems; based on the principle of cost causation, such a  
16 customer should pay more for their service. By the same logic, a customer that uses  
17 electricity efficiently should pay less for their service. Setting the customer charge at a  
18 level above that needed to recover dedicated customer-related costs erodes the price  
19 signal which a volumetric (i.e., energy) charge would otherwise send.

---

<sup>20</sup> *Ibid*, page 15.

<sup>21</sup> *Ibid*.

1 **Q. Is the Company's use of the rate increase from the Commission's decision in the**  
2 **prior rate case (ER-2014-0351) an adequate alternative for determining the**  
3 **residential customer charge increase in this case?**

4 A. No. The increase granted by the Commission in that prior case resulted from negotiations  
5 among the Signatories to the Stipulation previously mentioned. Evidence on the customer  
6 charge was not vetted through cross-examination or presented for decision by the  
7 Commission. The revenue increase considered in that case is not necessarily applicable to  
8 the increase under the present circumstances, particularly when the Company has  
9 determined a new revenue requirement based largely on cost increases best recovered  
10 through volumetric rates. The use of the Commission's approved residential rate increase  
11 from ER-2014-0351 is thus an inappropriate proxy for a cost of service adjustment in this  
12 context, and would likely result in the over-collection of revenues from residential  
13 customers if approved. This is because the revenue increase from any particular case is  
14 based on the revenue requirement in that case, so using a revenue increase outside of the  
15 context of the appropriate case could result in over-collection.

16 **Q. What was the Commission's specific decision regarding residential rate design in**  
17 **the Company's previous rate case (ER-2014-0351)?**

18 A. Following a Stipulation and Agreement,<sup>22</sup> the Commission ordered an "across the board"  
19 increase to all rate components for all classes on an equal percentage basis<sup>23</sup> based on a

---

<sup>22</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Revised Stipulation and Agreement and List of Issues, April 8, 2015.

<sup>23</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area*, Report and Order, June 24, 2015, page 21.

1 3.9 percent revenue increase.<sup>24</sup> However, the Commission also increased residential  
2 volumetric rates by approximately two percent on a revenue-neutral basis, “in order to  
3 send a more accurate pricing signal to all of Empire’s customers and take a  
4 significant step towards moving the residential class closer to its cost of service”  
5 (emphasis added).<sup>25</sup>

6 **Q. Did all parties to ER-2014-0351 support substantially higher residential customer**  
7 **charge increases?**

8 A. No. The Commission Staff only recommended a \$0.27 increase in the residential  
9 customer charge in its CCOS report.<sup>26</sup> Office of the Public Counsel (“OPC”) witness Dr.  
10 David E. Dismukes, despite finding in his CCOS study that Empire’s residential customer  
11 charges should have been higher, recommended against any increase because a) Empire’s  
12 customer charge was higher than all but five Midwestern utilities which he analyzed, and  
13 b) the Company already recovered the majority of its customer-related costs at the time  
14 through the customer charge.<sup>27</sup>

---

<sup>24</sup> *Ibid*, page 14.

<sup>25</sup> *Ibid*, page 20.

<sup>26</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company’s Missouri Service Area*, Missouri Public Service Commission Staff’s Rate Design and Class Cost-of Service Report, February 11, 2015, Page 41, lines 15-17.

<sup>27</sup> Missouri Public Service Commission Case No. ER-2014-0351, *In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company’s Missouri Service Area*, Direct Testimony of David E. Dismukes on behalf of the Office of the Public Counsel, February 11, 2015, page 40, lines 1-19.

1 **Q. Did the Commission order any increase to the Company's residential customer**  
2 **charge in that case?**

3 A. No.<sup>28</sup> The Commission approved no increase to the residential customer charge; in doing  
4 so, it mentioned considerations of efficiency and conservation:

5 Shifting customer costs from variable volumetric rates—that a customer can  
6 reduce through energy efficiency—to fixed customer charge will reduce incentive  
7 efforts to conserve energy. While Staff's CCOS study supports an increase to  
8 residential and all other customer charges by the average increase for each  
9 applicable class, the Signatories agreed in the Revised Agreement to not increase  
10 the residential customer charge. (Citations omitted.)<sup>29</sup>

11 The Commission should make a finding in the current case consistent with this past  
12 decision.

13 **Q. Would the proposed residential rate design in this case correct the price signal to**  
14 **customers and better encourage efficiency, as claimed by Mr. Keith?**

15 A. No. The proposed rate design would, as previously noted, shift cost recovery towards  
16 customer charges, which do not vary each month with the amount of energy used. Such a  
17 shift sends an incorrect price signal with respect to encouraging efficient energy use. An  
18 appropriate signal is sent through a greater emphasis on variable energy charges.

---

<sup>28</sup> ER-2014-0351, Report and Order, page 20, footnote 51.

<sup>29</sup> *Ibid*, page 16.

1 **Q. In what way does a shift towards revenue recovery through customer charges**  
2 **discourage customer efficiency?**

3 A. Since the customer charge must be paid, changes in consumption do not alter this portion  
4 of a customer's bill. Increases to the customer charge relative to the volumetric charge  
5 would increase the amount of the bill which customers cannot avoid through more  
6 efficient energy consumption. Consequently, low use customers would receive  
7 disproportionate bill increases, while higher use customers would receive lower than  
8 average bill increases. A rate design which more properly encourages efficient  
9 consumption would place higher emphasis on the volumetric charge, since customers  
10 who use less energy would receive relatively lower bills than with an emphasis on a  
11 customer charge increase.

12 **Q. Could an increased customer charge also decrease the Company's incentive to**  
13 **pursue operational efficiencies?**

14 A. Yes, it is possible. Increased revenue recovery through the customer charge would  
15 guarantee the recovery of a greater amount of revenue for the Company, since ratepayers  
16 cannot avoid paying customer charges. Decreases in Empire's revenues naturally incent  
17 attempts by the Company to decrease costs to maintain its profits, while a steady level of  
18 revenue recovery provides no such signal. With a guarantee of recovering revenues  
19 regardless of use (i.e., via the customer charge), Empire would have a smaller incentive  
20 to control costs.

21 **Q. Does the Company recognize these economic principles?**

22 A. No. In its response to part of a Data Request by OPC, Empire claims:



1           The current Empire rate design includes the recovery of a substantial portion of  
2           fixed costs through the variable charges. When a customer is evaluating  
3           investments in energy efficient appliances, this inaccurate pricing will overstate  
4           the cost savings the customer will see over the life of the investment.<sup>30</sup>

5           The Company asserts that customers should make decisions about energy efficiency  
6           based on cost savings resulting from the Company's cost of service. The principles of  
7           rate design do not require customers to consider the Company's cost allocation in their  
8           efficiency and consumption decisions; in fact, the exact opposite is true, since rate design  
9           should encourage more efficient consumption.

10   **Q. Do you agree with Mr. Keith that low-income customers would benefit under the**  
11   **Company's residential rate design proposal?**

12   A. No. This assertion is based on the faulty conclusion that low-income customers tend to  
13   use more energy than other residential customers. In turn, this conclusion seems to be  
14   based on Mr. Keith's equally inappropriate implication that Low Income Home Energy  
15   Assistance Program customers are representative of low-income customers as a whole.<sup>31</sup>

16   **Q. Is the Company's residential rate design proposal equitable?**

17   A. No. The proposal shifts the risk of revenue recovery towards residential customers  
18   through an emphasis on customer charges, over which customers have virtually no  
19   control. Since the emphasis on increased customer charges disproportionately impacts  
20   low use customers, the Company's proposal would not lead to an equitable outcome,  
21   particularly when the Company has not provided a supporting CCOS study.

---

<sup>30</sup> Company Response to OPC Data Request DR 5049, Part a.

<sup>31</sup> Keith, page 11, lines 9-16.

1 **Q. Would lower customer charges, in fact, promote the retention of customers?**

2 A. Yes. Given that customer charges must be paid regardless of the amount of electricity  
3 used, low-use customers are, as noted above, effectively penalized by higher customer  
4 charges. This can increase the risk that such customers, particularly if they are low-  
5 income customers, will disconnect from the utility's system due to an inability to pay  
6 their bills. Lower customer charges alleviate this risk, allowing more customers to  
7 maintain their service and providing the Company with economies of scale through  
8 increased numbers of customers using electricity.

9 **Q. If lower customer charges are generally beneficial, should there be customer**  
10 **charges at all?**

11 A. Yes. Rate design principles suggest that there is an inherent value in the ability to access  
12 electricity services. The most basic level of service still requires utilities to incur certain  
13 dedicated customer-related costs; thus, it is reasonable that customers should pay for  
14 these types of costs regardless of use. However, the joint and common nature of many  
15 utility costs, with the exception of non-dedicated plant costs, strongly supports the  
16 recovery of most utility costs through a volumetric charge. A dual rate structure with  
17 relatively low customer charges thus recognizes the principles commonly accepted in the  
18 fields of economics, rate design, and public policy. There may even be a public interest  
19 exception which would favor particularly low customer charges for low-income  
20 customers in order to assure access to affordable electricity.

1 **Q. Does the Company's residential rate design proposal represent a gradual increase**  
2 **which would avoid rate shock?**

3 A. No. A 9.57 percent class revenue increase with such a heavy emphasis on unavoidable  
4 customer charges would be difficult for some customers, particularly following the  
5 Company's previous residential rate increase in ER-2014-0351. Even the addition of a  
6 small absolute dollar amount to the residential customer charge represents a significant  
7 burden for some customers, particularly when the Company's residential customer charge  
8 is already relatively high.

9 **Q. Did the Commission consider "rate shock" in the Company's previous general rate**  
10 **case?**

11 Yes. Even though the Commission chose a greater revenue-neutral adjustment to  
12 residential rates in the prior case than proposed by the Stipulation's Signatories, the  
13 Report and Order in ER-2014-0351 specifically considers rate shock:

14 The Signatories ... recommend a neutral adjustment recommended by the  
15 Signatories (a 0.75% increase for the residential class) to address the recognized  
16 8.1% residential rate class discrepancy. MECG recommends an increase to  
17 residential rates by 25% of the needed 8.1% revenue neutral adjustment .... **The**  
18 **difference between the two is not of such a significant amount as to cause**  
19 **"rate shock."** (Emphasis added.)<sup>32</sup>

---

<sup>32</sup> ER-2014-0351, Report and Order, page 20.

1 **Q. Did the Commission recognize other rate design considerations besides cost**  
2 **causation, efficiency, and rate shock in that Report and Order?**

3 A. Yes. A mention of gradualism is made when considering an instant adjustment towards  
4 cost of service for the residential rate class: "Attempting to completely eradicate the 8.1%  
5 residential rate class discrepancy in this rate case would be too punitive to the customers  
6 in that class."<sup>33</sup> Empire's residential rate design proposal in the current case is not  
7 gradual.

8 **Q. In light of these considerations, does DE support Empire's residential rate design**  
9 **proposal?**

10 A. No. DE recommends that the Commission reject the Company's rate design proposal,  
11 since it is not supported by cost of service, cost causation, efficiency, gradualism, or rate  
12 shock considerations. Instead, DE recommends that the Commission only approve an  
13 increase to the residential energy charges, in keeping with its decision in the prior rate  
14 case (ER-2014-0351) and general rate design considerations. Such considerations are  
15 particularly important given Empire's already high residential customer charge compared  
16 to other investor-owned utilities in Missouri.

17 **IV. BILL FREQUENCY AND BILL IMPACT ANALYSES**

18 **A. BILL FREQUENCY ANALYSIS**

19 **Q. What is the purpose of a bill frequency analysis?**

20 A. The purpose of a bill frequency analysis is to determine the average (mean), minimum,  
21 and maximum amount of use for various groups of customers. This analysis can serve as  
22 the basis for other calculations, such as a bill impact analysis.

---

<sup>33</sup> *Ibid*, page 18.

1 **Q. What is the basis of your analysis?**

2 A. My analysis is based on highly confidential, non-weather-normalized data provided by  
3 the Company in response to DE Data Request No. 407.

4 **Q. How did you conduct your analysis?**

5 A. I used the "Data Analysis" function in Excel to create summary statistics by billing  
6 month. Based on the Company's residential tariff, I began each separate billing month  
7 analysis on the 16<sup>th</sup> day of a given month; for example, I started the June billing month  
8 analysis with billing dates of June 16<sup>th</sup>.

9 **Q. Why did you use a billing month rather than a calendar month?**

10 A. Using the billing month allows for a more accurate bill impact analysis and also provides  
11 better information about customer usage, since customers are not billed based on the  
12 calendar month.

13 **Q. Did you independently conduct your statistical analysis?**

14 A. Yes.

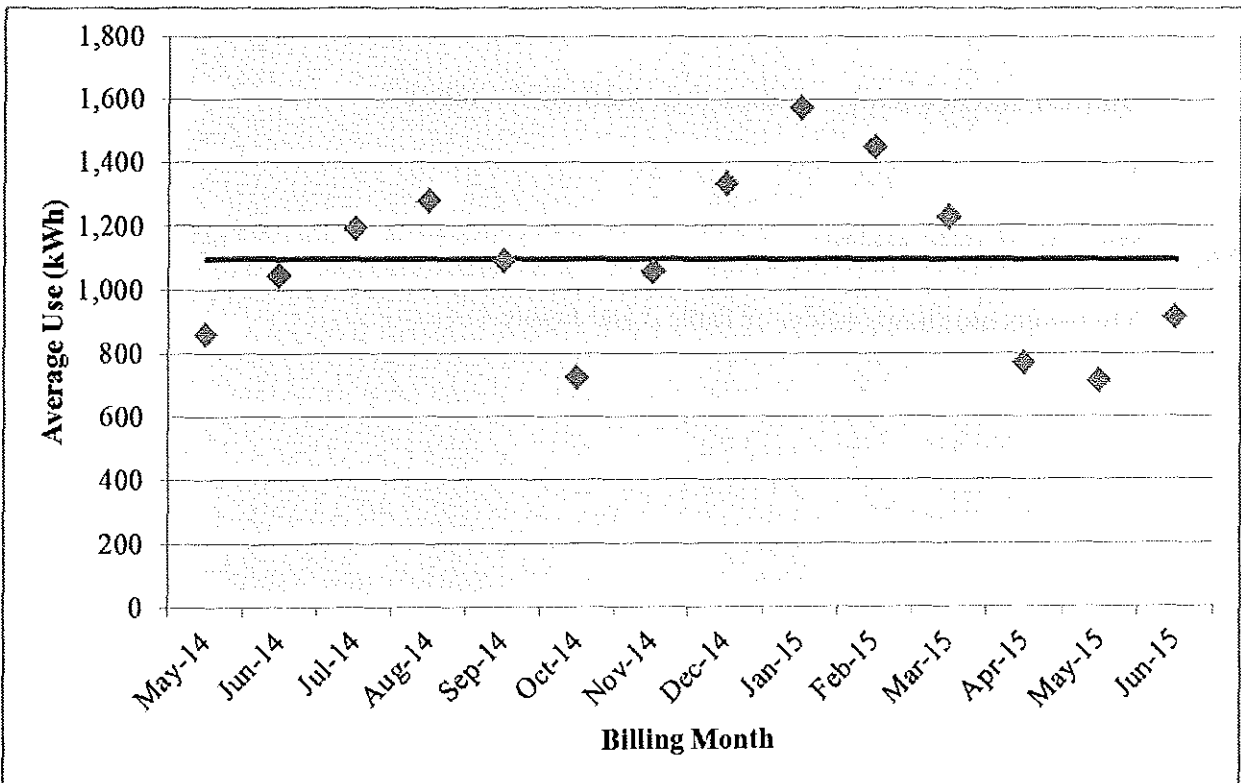
15 **Q. What were your results?**

16 A. My results are shown below in Table 2 and Figure 1.

1 **Table 2. Bill frequency results for Empire residential customers in kWh.**

Billing Month	Mean	Minimum	Maximum	Standard Deviation	Sample Size
May-14	858.0	0.0	6,979	635.9	2,302
Jun-14	1,042.7	0.0	18,000	779.4	4,923
Jul-14	1,189.5	0.0	18,480	848.7	5,801
Aug-14	1,275.0	0.0	18,240	890.9	5,065
Sep-14	1,087.1	0.0	22,080	818.2	5,120
Oct-14	724.6	0.0	17,040	554.2	6,010
Nov-14	1,054.0	0.0	15,520	868.6	5,524
Dec-14	1,334.5	0.0	20,240	1,115.6	5,335
Jan-15	1,571.9	0.0	25,200	1,370.1	5,667
Feb-15	1,447.8	0.0	18,800	1,259.8	5,705
Mar-15	1,229.1	0.0	25,040	1,124.6	5,804
Apr-15	767.6	0.0	16,320	598.3	6,491
May-15	713.3	0.0	14,080	561.4	5,676
Jun-15	913.1	0.0	19,680	723.6	3,075
<b>Overall</b>	<b>1,096.2</b>	<b>0.0</b>	<b>25,200.0</b>	<b>955.4</b>	<b>72,498</b>

2 **Figure 1. Average residential usage amounts by billing month; average use for the entire**  
 3 **data set shown in red.**



1 **Q. What can you conclude from these results?**

2 A. The average use of Empire's residential customers varies considerably from billing  
3 month to billing month, with "peaks" in both the mid- to late summer and winter billing  
4 months. This pattern reflects a significant electric space heating load in Empire's service  
5 territory.

6 **B. BILL IMPACT ANALYSIS OF COMPANY'S PROPOSAL**

7 **Q. What is the purpose of a bill impact analysis?**

8 A. The purpose of a bill impact analysis is to determine the changes to customer bills as the  
9 result of changes in rates. While such an analysis is often based on the "average"  
10 customer's use, it should also take into account customers who use more or less amounts  
11 of a given commodity to determine equity and efficiency impacts.

12 **Q. What is the basis of your analysis?**

13 A. My analysis is based on the bill frequency analysis described above, along with the  
14 Company's current and proposed rates.

15 **Q. How did you conduct your analysis?**

16 A. I used the averages derived from the bill frequency analysis, in addition to usage amounts  
17 50 percent below and 100 percent above these averages. I selected these lower and higher  
18 usage amounts to illustrate the bill impacts of the Company's proposal based on  
19 variations in residential customer usage, without using the extreme minima and maxima  
20 from the analysis. The usage amounts which I have described are shown below in Table  
21 3.

1 **Table 3. Empire residential customer usage amounts used in bill impact analysis (kWh).**

Billing Month	Average Use	50% Less Use	100% More Use
May-14	858.0	429.0	1,715.9
Jun-14	1,042.7	521.4	2,085.4
Jul-14	1,189.5	594.7	2,378.9
Aug-14	1,275.0	637.5	2,550.0
Sep-14	1,087.1	543.5	2,174.2
Oct-14	724.6	362.3	1,449.1
Nov-14	1,054.0	527.0	2,108.1
Dec-14	1,334.5	667.3	2,669.0
Jan-15	1,571.9	786.0	3,143.8
Feb-15	1,447.8	723.9	2,895.6
Mar-15	1,229.1	614.6	2,458.3
Apr-15	767.6	383.8	1,535.3
May-15	713.3	356.6	1,426.6
Jun-15	913.1	456.5	1,826.2

2 Additionally, it should be noted that my analysis evaluated the Company's rates based on  
3 the seasons indicated in its tariffs.

4 **Q. What were your results?**

5 **A.** My results are shown below in Tables 4a through 4c, as well as Figure 2.



1 Table 4a. Empire residential bill impacts under current rates.

Billing Month	Average Use	50% Less Use	100% More Use
May-14	\$111.74	\$65.09	\$197.20
Jun-14	\$140.29	\$76.41	\$268.07
Jul-14	\$158.28	\$85.40	\$304.04
Aug-14	\$168.76	\$90.64	\$325.00
Sep-14	\$145.73	\$79.13	\$278.94
Oct-14	\$98.45	\$56.91	\$170.62
Nov-14	\$131.27	\$77.10	\$236.26
Dec-14	\$159.21	\$92.74	\$292.14
Jan-15	\$182.86	\$104.57	\$339.43
Feb-15	\$170.49	\$98.39	\$314.71
Mar-15	\$148.71	\$87.49	\$271.15
Apr-15	\$102.74	\$59.55	\$179.21
May-15	\$97.33	\$56.22	\$168.38
Jun-15	\$124.41	\$68.46	\$236.30

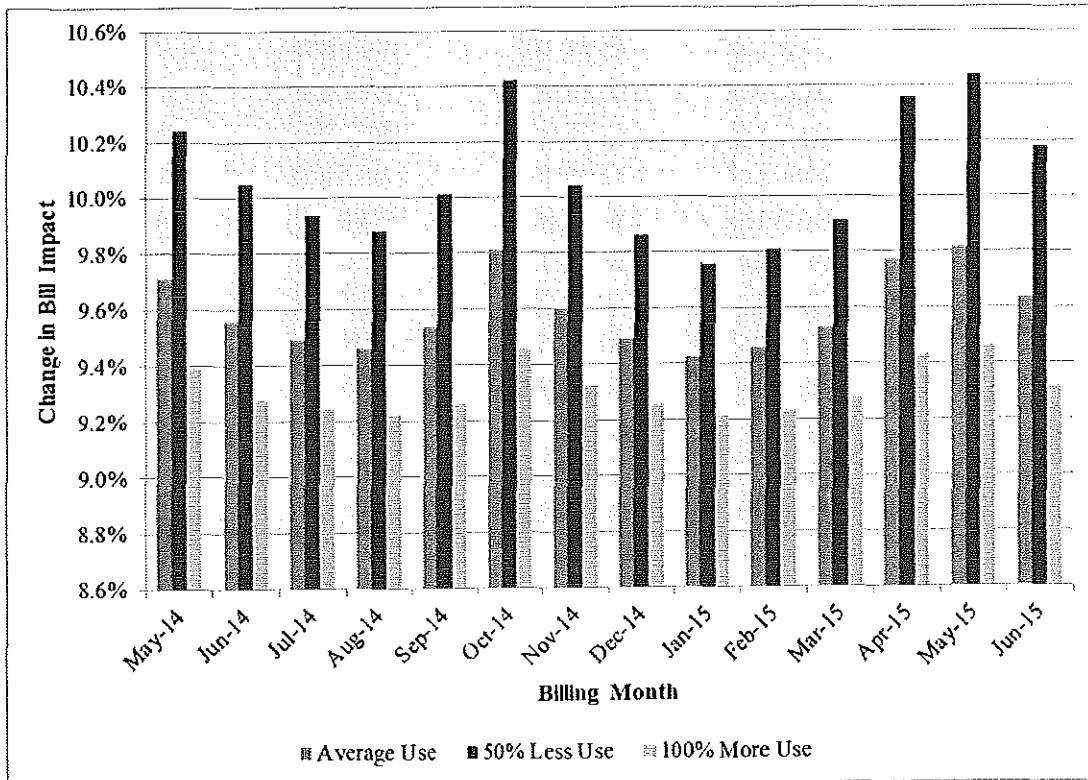
2 Table 4b. Empire residential bill impacts under the Company's proposed rates.

Billing Month	Average Use	50% Less Use	100% More Use
May-14	\$122.59	\$71.75	\$215.72
Jun-14	\$153.70	\$84.09	\$292.93
Jul-14	\$173.30	\$93.89	\$332.13
Aug-14	\$184.72	\$99.60	\$354.98
Sep-14	\$159.63	\$87.05	\$304.79
Oct-14	\$108.11	\$62.85	\$186.76
Nov-14	\$143.87	\$84.84	\$258.29
Dec-14	\$174.32	\$101.89	\$319.18
Jan-15	\$200.09	\$114.77	\$370.72
Feb-15	\$186.62	\$108.04	\$343.77
Mar-15	\$162.88	\$96.17	\$296.30
Apr-15	\$112.79	\$65.72	\$196.11
May-15	\$106.88	\$62.09	\$184.31
Jun-15	\$136.39	\$75.43	\$258.32

1 **Table 4c. Change in residential bill impacts between current and Company's proposed**  
 2 **rates.**

Billing Month	Average Use	50% Less Use	100% More Use
May-14	9.7%	10.2%	9.4%
Jun-14	9.6%	10.1%	9.3%
Jul-14	9.5%	9.9%	9.2%
Aug-14	9.5%	9.9%	9.2%
Sep-14	9.5%	10.0%	9.3%
Oct-14	9.8%	10.4%	9.5%
Nov-14	9.6%	10.0%	9.3%
Dec-14	9.5%	9.9%	9.3%
Jan-15	9.4%	9.8%	9.2%
Feb-15	9.5%	9.8%	9.2%
Mar-15	9.5%	9.9%	9.3%
Apr-15	9.8%	10.4%	9.4%
May-15	9.8%	10.4%	9.5%
Jun-15	9.6%	10.2%	9.3%

3 **Figure 2. Empire residential bill impact changes between current and proposed rates.**



1 **Q. What do you observe from these results?**

2 A. Across all months, residential customers with higher usage would experience a smaller  
3 percentage bill impact than customers with average usage. Additionally, customers with  
4 average usage would experience lower percentage bill impacts than customers with lower  
5 usage.

6 **Q. Do your bill frequency and bill impact analyses support your previous conclusions**  
7 **regarding the Company's rate design proposals?**

8 A. Yes. As is clear from Table 4c and Figure 2, residential customers with higher usage  
9 would experience smaller percentage bill impacts under the Company's proposal than  
10 those with average and lower usages. This is true regardless of the time of year. The  
11 analysis shows that the Company's proposal does not incent efficient usage.

12 **V. RESIDENTIAL VOLUMETRIC RATE DESIGN**

13 **Q. What is Empire's current residential volumetric rate structure?**

14 A. Empire's residential customers pay for the electricity which they use under "declining  
15 block rates" in the winter and "uniform volumetric rates" in the summer. Under declining  
16 block rates, usage past a certain "block" (i.e., number of kWh) is charged at a lower rate  
17 per kWh; with uniform volumetric rates, all usage is charged the same rate per kWh.

18 **Q. Can volumetric rates be redesigned to better encourage efficient use?**

19 A. Yes. In general, customers receive a better price signal under uniform volumetric rates  
20 than with declining block rates, since higher usage under the latter incurs a lower charge  
21 per kWh. This lower charge essentially provides a discount to higher use customers,  
22 providing a weaker encouragement for efficiency past the initial rate block or blocks.

1 “Uniform volumetric” rate structures, by contrast, reward customers on an even basis for  
2 efficiency efforts at all levels of use.

3 An “inclining block rate” provides the best price signal when properly designed. Under  
4 inclining block rates, customers are charged more per kWh for use past a certain rate  
5 block or blocks. This indicates to customers that higher use incurs higher charges, and  
6 provides greater rewards for customers who undertake efficiency efforts within the higher  
7 block or blocks.

8 **Q. Should the Commission require Empire to gradually move towards residential**  
9 **uniform volumetric or inclining block rates?**

10 A. Yes. Customer rates should be transitioned in a gradual and considerate manner for  
11 several reasons. Customers with a low income could face an even greater energy burden  
12 by being charged more if they use electricity above the initial block of an inclining block  
13 rate; consequently, it is important from an equity perspective to determine an average  
14 amount of “basic” residential electricity use in setting this first block’s usage level and  
15 the associated volumetric charge. Similarly, impacts on customers using electric space  
16 heating should also be considered, since they may more easily pass the initial block of  
17 use under an inclining block rate. It is also important to determine the amount of  
18 “discretionary” residential electricity use in setting the higher block levels and associated  
19 volumetric charges of inclining block rates; discretionary use can vary by customer,  
20 particularly based on whether or not customers use electricity for space heating.

21 A sudden transition to uniform volumetric rates, and more so to inclining block rates,  
22 would create rate shock, particularly for customers using electric heat and for low-income  
23 customers. The degree to which this rate shock would occur – and to which efficiency

1 signals would be sent – would vary based on the actual rate design. This is an indication  
2 that designing volumetric rates, particularly inclining block rates, can be challenging due  
3 to the need to determine how billing units and revenue requirements should be adjusted at  
4 the various rate blocks. The price elasticity of demand, or how much customers adjust  
5 consumption based on price changes, complicates these decisions, since customer shifts  
6 in usage resulting from price signals can lead to deviations in projected revenue recovery  
7 and efficiency gains.

8 **Q. Can you illustrate the potential impacts on residential electric heating space**  
9 **customers of moving towards uniform volumetric rates?**

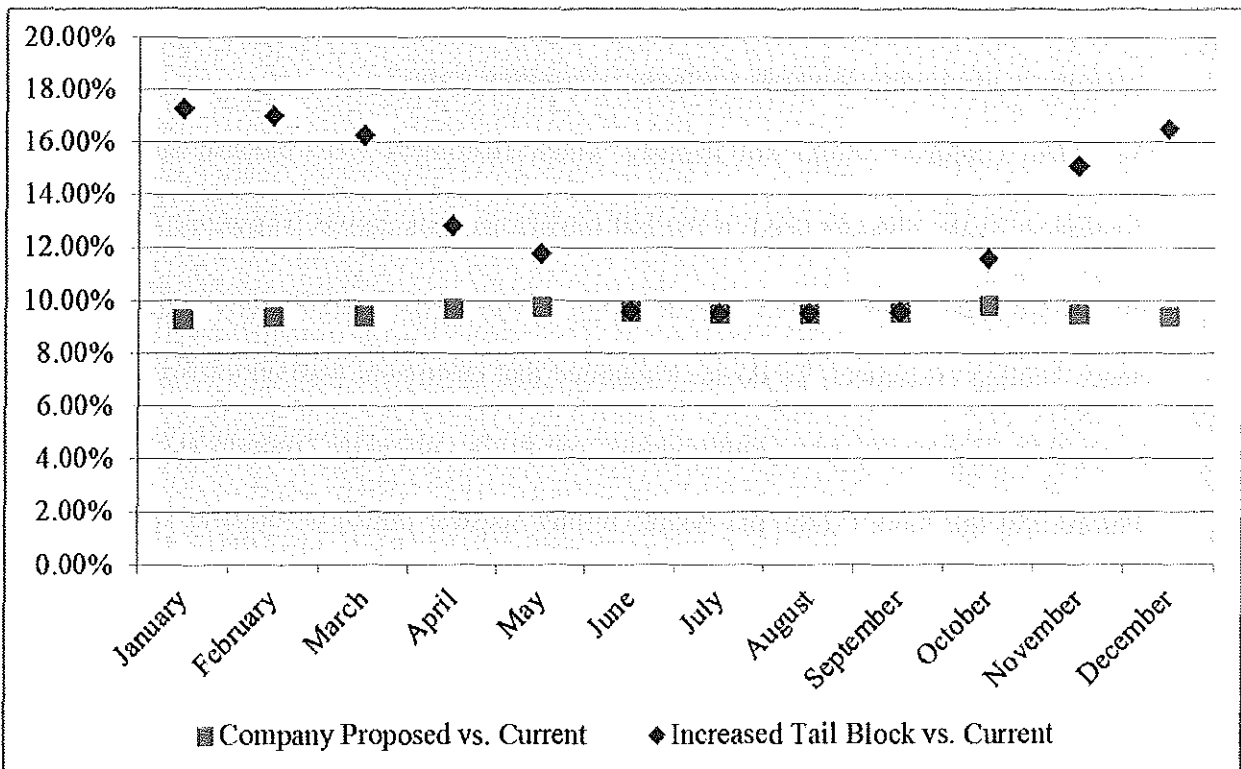
10 A. Yes. The Company could not identify which customers were electric space heating  
11 customers in the data set used in the bill impact analysis above. Therefore, I performed  
12 another analysis on the data to determine which customers in the sample could be electric  
13 space heating customers. To do so, I assumed that customers with an average winter use  
14 more than 25 percent above their average use in the “shoulder” months (i.e., the month  
15 before and the month after the winter billing season) might be electric space heating  
16 customers. Although there could be electric space heating customers with a smaller usage  
17 differential, it is likely that there are many with an even greater differential.

18 I then compared the average usages by month of this set of customers to a hypothetical  
19 winter rate design. This rate design moves the tail block of the Company’s proposed  
20 residential winter rate halfway towards the first block (see Table 5 below). As shown in  
21 Figure 3, the bill impact for these customers can be up to 7.28 percent higher than the bill  
22 impact under the Company’s proposal; this results in an annual bill increase for these  
23 customers of \$78.32 over the bill impact under the Company’s proposal.

**Table 5. Residential rates with increased winter tail block – 50 percent movement towards first block.**

Charge Type	Winter	Summer
Customer Charge	\$14.47	
Volumetric Charge (Block 1)	\$0.13353	\$0.13353
Volumetric Charge (Block 2)	\$0.12104	\$0.13353

**Figure 3. Change in bill impacts on potential electric space heating customers of moving residential winter tail block 50 percent towards initial block.**



**Q. What is your recommendation with respect to residential volumetric rate design in this case?**

**A.** Given the complexity of properly designing residential volumetric rates, I recommend that the Commission open a working docket in which parties to this case can explore how to design these rates. Such a working docket should be concluded prior to the Company's

1 next general rate case filing in order to provide timely results; in view of this  
2 consideration, the Commission could order that the docket be concluded within 12  
3 months following the effective date of rates in this case. Although implementing  
4 residential inclining block rates (or even uniform winter volumetric rates) immediately  
5 following this case could cause rate shock, such a gradual implementation should be  
6 considered for a future rate case. A working docket would provide parties to this case the  
7 opportunity to fully examine the issues surrounding residential volumetric rate design  
8 prior to the implementation of new rate types. Any fundamental redesign of residential  
9 rates should consider efficiency, gradualism, and rate shock concerns, along with equity  
10 concerns related to factors such as temperature, income, electric space heating use, and  
11 household size.

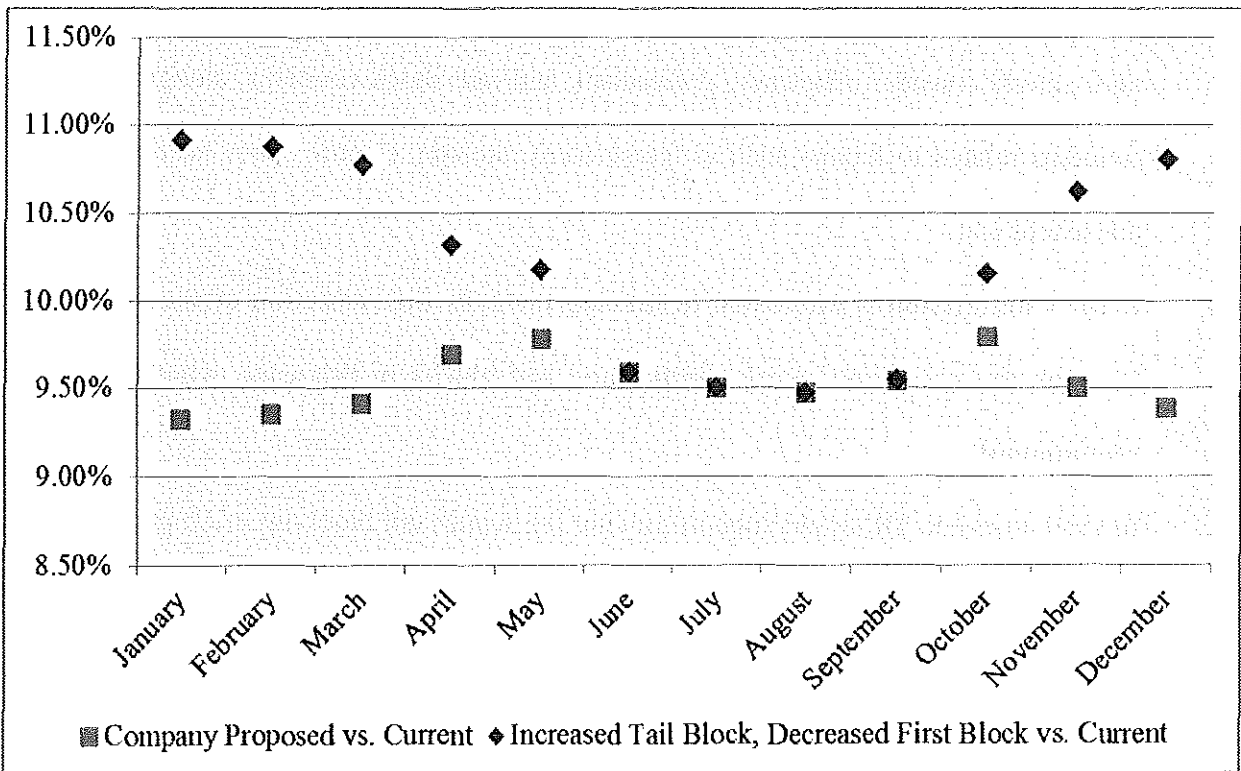
12 **Q. If the Commission is interested in moving towards the reduction of the differential**  
13 **between the residential winter initial and tail blocks in this case, what would you**  
14 **recommend?**

15 A. In such an event, DE could support moving the winter tail block up to 10 percent of the  
16 way towards the initial block; this would result in the rates shown in Table 6 based on the  
17 Company's proposal. At this increase, the group of potential electric space heating  
18 customers which I identified would experience a relatively small annual increase over the  
19 Company's proposal of \$15.66. The comparison of the change in bill impacts between  
20 these two rate designs is shown in Figure 4.

1 **Table 6. Residential rates with increased winter tail block – 10 percent movement towards**  
 2 **first block.**

Charge Type	Winter	Summer
Customer Charge	\$14.47	
Volumetric Charge (Block 1)	\$0.13353	\$0.13353
Volumetric Charge (Block 2)	\$0.11105	\$0.13353

3 **Figure 4. Change in bill impacts on potential electric space heating customers of moving**  
 4 **residential winter tail block 10 percent towards initial block.**



5 **VI. DEMAND-SIDE MANAGEMENT**

6 **Q. Does Empire currently have a portfolio of DSM programs?**

7 A. Yes. These programs are specified under the Company’s Promotional Practices tariffs  
 8 (Missouri Public Service Commission Tariff Nos. YE-2011-0615 and JE-2010-0061, The



1 Empire District Electric Company, Schedule PRO, various dates, Sec. 4, Sheet Nos. 8a  
2 and 8d-8j).

3 **Q. Are these programs offered under MEEIA?**

4 A. No.

5 **Q. Until when must Empire offer its current DSM programs?**

6 A. Under the Revised Stipulation and Agreement in Empire's last rate case (ER-2014-0351),  
7 the Company is required to continue its DSM programs (aside from its low-income  
8 weatherization program, or "LIWAP"), "...at current funding levels and with the current  
9 recovery mechanism, until Empire has an approved MEEIA or until the effective date of  
10 rates in Empire's next general rate case."<sup>34</sup> The Company is separately required to  
11 continue its LIWAP offering without a specified end date.<sup>35</sup>

12 **Q. Might the Company terminate many of its DSM programs at the conclusion of this  
13 case?**

14 A. Yes. Without direction from the Commission to continue offering existing DSM  
15 programs, the Company could terminate its DSM portfolio entirely following the  
16 effective date of rates in this rate case.

---

<sup>34</sup> ER-2014-0351, Revised Stipulation and Agreement and List of Issues, page 4.

<sup>35</sup> *Ibid.*

1 **Q. Has the Company indicated that it wishes to terminate any of its current DSM**  
2 **programs?**

3 A. Empire has not made such an indication through its revised tariff filing;<sup>36</sup> however, the  
4 Company has indicated its intent to discontinue its DSM programs in its recent triennial  
5 IRP filing (EO-2016-0223).<sup>37</sup>

6 **Q. Is the Company required to file a MEEIA portfolio application?**

7 A. No. Under §393.1075.4, RSMo., “The commission shall **permit** electric corporations to  
8 implement commission-approved demand-side programs proposed pursuant to this  
9 section with a goal of achieving all cost-effective demand-side savings” (emphasis  
10 added).

11 **Q. Notwithstanding this language, is it the statutory policy that the state values DSM**  
12 **programs?**

13 A. Yes. §393.1075.3 RSMo. states in part, “It **shall be the policy** of the state to **value**  
14 **demand-side investments equal to traditional investments in supply and delivery**  
15 **infrastructure** and allow recovery of all reasonable and prudent costs of delivering cost-  
16 effective demand-side programs” (emphases added).

17 **Q. Do other investor-owned utilities in Missouri offer DSM programs under MEEIA?**

18 A. Yes. Ameren Missouri’s MEEIA Cycle II portfolio was approved on February 10,  
19 2016,<sup>38</sup> and the MEEIA Cycle II portfolios of both KCP&L and GMO were approved on

---

<sup>36</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Kelly Walters, Filing Letter, October 16, 2015, page 1.

<sup>37</sup> Missouri Public Service Commission Case No. EO-2016-0223, *In the Matter of The Empire District Electric Company’s 2016 Triennial Compliance Filing Pursuant to 4 CSR 240-22*, The Empire District Electric Company, Volume 7 – Resource Acquisition Strategy Selection, April 1, 2016, pages 34-35.

1 March 2, 2016.<sup>39</sup> Empire is thus the only investor-owned electric utility in the state which  
2 lacks a MEEIA portfolio. If the Company is allowed to discontinue its DSM programs  
3 entirely, then it will be the only investor-owned electric utility in the state without DSM  
4 programs.

5 **Q. Is it important for the Company to offer DSM programs in light of its rate increase**  
6 **request?**

7 A. Yes. DSM programs better enable customers to use energy efficiently, reduce demand, or  
8 shift demand to off-peak periods, thereby mitigating the impacts of rate increases.  
9 Empire's discontinuation of these programs, combined with its proposed residential  
10 customer charge increase, would severely reduce the ability of residential customers to  
11 control their bills while increasing the Company's guarantee of recovering its revenue  
12 requirement. Even if it were true that the discontinuation of the Company's DSM  
13 programs produced the lowest net present value revenue requirement for Empire, this  
14 shift in control over customer bills should be of enough to concern to lend support to  
15 continuing Empire's current DSM programs.

16 **Q. Have any other parties to this case addressed Empire's DSM programs?**

17 A. Yes. Staff witness Mr. Brad J. Fortson indicates in Staff's revenue requirement report that  
18 there is, "... outdated and incorrect information within Empire's DSM programs tariff

---

<sup>38</sup> Missouri Public Service Commission Case No. EO-2015-0055, *In the Matter of Union Electric Company d/b/a Ameren Missouri's 2<sup>nd</sup> Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA*, Order Approving Non-Unanimous Stipulation and Agreement, February 10, 2016, page 6.

<sup>39</sup> Missouri Public Service Commission Case Nos. EO-2015-0240 and EO-2015-0241, *In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism and In the Matter of KCP&L Greater Missouri Operations Company's Filing for Approval of Demand-Side Programs and for Authority to Establish a Demand-Side Programs Investment Mechanism*, Report and Order, March 2, 2016, pages 16-17.

1 sheets ...,”<sup>40</sup> and that Empire’s current DSM programs may be addressed by Staff in its  
2 Rebuttal Testimony.<sup>41</sup>

3 **Q. In view of these circumstances, what do you recommend?**

4 A. DE encourages the Company to file a MEEIA portfolio application in order to fulfill the  
5 policy goal set forth in the MEEIA statute and to assist the Company’s customers with  
6 the rate impacts resulting from this case. However, since a MEEIA application is not  
7 required by statute, DE recommends that, at the very least, the Commission order Empire  
8 to continue its DSM program offerings at current funding levels until the Company  
9 receives approval for a MEEIA portfolio. Additionally, DE supports requiring the  
10 Company to correct the outdated and erroneous information in its DSM tariffs. DE offers  
11 these recommendations in order to ensure the continued availability of DSM programs in  
12 Empire’s service territory.

13 **VII. CONCLUSIONS**

14 **Q. Please summarize your conclusions and the positions of DE.**

15 A. DE is opposed to Empire’s proposed residential rate design in this case, since it is not  
16 cost-based and does not follow principles of efficiency, equity, gradualism, or avoidance  
17 of rate shock. Consequently, the Commission should maintain the residential customer  
18 charge at its current level.

19 Additionally, DE recommends the formation of a working docket to explore the design of  
20 block rates for Empire’s residential customers. Should the Commission wish to move  
21 towards the reduction of the differential between the residential winter tail and initial

---

<sup>40</sup> Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Staff Report – Revenue Requirement, March 25, 2016, page 110, lines 21-26.

<sup>41</sup> *Ibid*, page 111, lines 19-20.

1 block rates, DE could support an adjustment of the tail block of up to 10 percent of the  
2 way towards the initial block. Finally, DE recommends that the Company be encouraged  
3 to file a MEEIA portfolio application; the Commission should, at the least, require  
4 Empire to continue its current DSM portfolio at current funding levels until such an  
5 application is approved so that there is a continued availability of programs which benefit  
6 customers. DE also supports requiring Empire to correct the outdated and incorrect  
7 information identified by Staff in the Company's DSM tariffs.

8 **Q. Does this conclude your Direct Testimony (Rate Design) in this case?**

9 **A. Yes.**