

BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS

In The Matter Of the Application                    )  
Of Kansas City Power & Light                    )  
Company To Make Certain                        )  
Changes in its Charges For                        )  
Electric Service.                                    )

KCC Docket No. 18-KCPE-480-RTS

**DIRECT TESTIMONY OF**

**STACEY HARDEN**

**ON BEHALF OF**

**CITIZENS' UTILITY RATEPAYER BOARD**

SEPTEMBER 12, 2018

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**I. STATEMENT OF QUALIFICATIONS**

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

2 A. My name is Stacey Harden. My business address is 1500 SW Arrowhead Road, Topeka,  
3 Kansas 66604.

4

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

6 A. I am employed by the Citizens' Utility Ratepayer Board ("CURB") as a Senior  
7 Regulatory Analyst.

8

9 **Q. Please describe your educational background.**

10 A. I earned a Bachelor of Business Administration degree from Baker University in 2001. I  
11 earned a Master of Business Administration degree from Baker University in 2004.

12

13 **Q. Please summarize your professional experience in the utility industry.**

14 A. I served as a Regulatory Analyst for the Citizens' Utility Ratepayer Board from February  
15 2008 until March 2016. I rejoined CURB in September 2017 as a Senior Regulatory  
16 Analyst.

17

18 **Q. Have you previously testified before the Commission?**

19 A. Yes. I have previously offered both written and live testimony in thirty proceedings  
20 before the Kansas Corporation Commission ("Commission"). A list of these dockets is  
21 available upon request.

22

1 **II. PURPOSE OF TESTIMONY**

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

3 A. On May 1, 2018, Kansas City Power and Light Company (“KCPL or “Company”) filed  
4 an Application with the Kansas Corporation Commission (“KCC” or “Commission”) seeking a base rate increase of a \$32.9 million. On June 26, 2018, Darrin Ives filed  
5 Supplemental Direct Testimony on behalf of KCPL in order to address the impact on the  
6 Company’s revenue requirement of the Commission-Approved Settlement Agreement (“Settlement Agreement”) in Docket No. 18-KCPE-095-MER (“Merger Docket”). As a  
7 result of the Merger Docket, Mr. Ives testified that the Company’s base rate request  
8 decreased from its original \$32.9 million to \$22.6 million. In addition to its request for a  
9 base rate increase, KCPL has also proposed three new voluntary rate choices for its  
10 residential customers. Additionally, KCPL is proposing educational energy-efficiency  
11 programs, and a new rate schedule for residential customers with distributed generation (“DG”). In my testimony I will provide comments and recommendations on KCPL’s new  
12 residential rate offerings and proposed educational energy-efficiency programs, as well as  
13 comments regarding the Company’s proposed DG rates. My testimony will supplement  
14 the testimony of CURB’s revenue requirement witness, Ms. Andrea Crane, and CURB’s  
15 rate design and cost allocation witness, Mr. Brian Kalcic.  
16  
17  
18  
19

20 **III. SUMMARY OF RECOMMENDATIONS**

21 **Q. Please summarize the recommendations made in your testimony.**

22 A, Based on my analysis of KCPL’s Application and discovery issued in this case, my  
23 recommendations are as follows:

1           1. I recommend KCPL's voluntary Residential Demand Service Pilot Program,  
2           Residential Time of Use Pilot Program, and Residential Demand Service Plus  
3           Time of Use Pilot Program be approved with the following conditions:

- 4           • the monthly customer charge, demand rates, and energy charges be  
5           approved consistent with the methodology recommended by CURB's  
6           class cost of service and rate design witness, Mr. Brian Kalcic.
- 7           • customers be granted a one-time opt-out provision at any time during their  
8           participation in the voluntary programs;
- 9           • after a customer's initial one-year agreement ends, the customer's  
10          participation in the voluntary rate program will automatically continue  
11          until such time as the customer requests to opt-out of the voluntary rate  
12          class and instead be placed back into the residential standard tariff;
- 13          • KCPL will submit an annual report to the Commission Staff ("Staff") and  
14          CURB that includes the number of customers participating in the  
15          voluntary programs, the number of customers that chose to opt-out, and a  
16          report regarding the participants' change in energy consumption; and
- 17          • any customer that utilizes the opt-out provision to return to the residential  
18          standard tariff, should not be permitted to switch back into the voluntary  
19          rate during the term of the pilot period.

20          2. I recommend the Commission deny KCPL's proposal to defer the difference in  
21          revenue received from customers participating in the voluntary rate programs as  
22          compared to what revenue otherwise would have been received if the customers  
23          remained on the residential standard rate for inclusion in its next rate case.

- 1           3. I recommend the Commission deny KCPL's proposed educational Demand Side  
2           Management Programs to be offered in conjunction with the voluntary residential  
3           rate programs.
- 4           4. Consistent with the recommendation presented by CURB witness Mr. Brian  
5           Kalcic, I recommend the Commission reject KCPL's proposed Demand Service  
6           for Residential Distributed Generation ("RDG") tariff. Alternatively, if the  
7           Commission decides to approve KCPL's proposed RDG tariff, I recommend the  
8           RDG tariff be approved with the following conditions:
- 9           • The Commission should approve the monthly customer charge, demand  
10           rates, and energy charges consistent with the methodology recommended  
11           by CURB's class cost of service and rate design witness, Mr. Brian  
12           Kalcic;
  - 13           • The Commission should permit prospective RDG customers that have  
14           signed a contract to install DG equipment before the effective date of the  
15           new rates in this proceeding to take service on KCPL's residential  
16           standard service rate schedule, so as not to invalidate the economics  
17           underlying the customer's decision to install DG equipment;
  - 18           • KCPL should provide a detailed annual report to Staff and CURB that  
19           includes the number of residential DG customers taking service from  
20           Schedule RDG, the demand and energy charges during the year, analysis  
21           regarding the customers' change in energy consumption, and a report of  
22           the bill impacts for each RDG customer; and
  - 23           • KCPL will file a new cost of service study for the purpose of examining

1 potential rate design alternatives for residential DG customers in its first  
2 general rate case following the five-year moratorium.

3

4 **IV. VOLUNTARY RATE CLASSES**

5 **Q. Please describe KCPL's proposed residential pilot rate programs.**

6 A. KCPL is proposing three new residential pilot rate programs. These three programs –  
7 Residential Demand Service Pilot Program (“RD”), Residential Time of Use Pilot  
8 Program (“RTOU”), and Residential Demand Service Plus Time of Use Pilot Program  
9 (“RDTOU”) – are being offered as a result of the Missouri Public Service Commission’s  
10 Order requiring a rate design study in KCPL Greater Missouri Operation’s Company’s  
11 (“GMO”) 2016 rate case. GMO retained Burns & McDonnell (“BMcD”) to conduct the  
12 study.

13 According to the Application, KCPL’s voluntary programs are designed to allow  
14 participating residential customers to take more control of their electric bills by  
15 modifying usage patterns or installing equipment that potentially results in a lower energy  
16 bill. The incentive for customers who participate in KCPL’s RD, RDTOU, or RTOU  
17 programs is a reduced energy charge if the customer can shift demand to the off-peak  
18 hours. As part of the voluntary rates, KCPL is proposing that residential customers who  
19 participate in the RD, RDTOU, or RTOU programs pay the same basic monthly service  
20 fee as customers in the residential standard class, in addition to demand charges and a  
21 reduced energy charge based on the time energy is consumed.

22 The proposed RD, RDTOU, or RTOU programs are pilot programs that will be  
23 available for up to 1,000 residential customers each. The RD, RDTOU, or RTOU

1 programs are voluntary for residential customers. According to KCPL witness Marisol  
2 Miller, KCPL plans to ensure the success of the pilot programs by tracking and analyzing  
3 the program results and progress. The data collected by KCPL during the pilot will be  
4 used to assess future rate design modifications, as well as to learn more about customer  
5 needs and wants.

6  
7 **Q. Have other utilities in Kansas requested Commission approval for voluntary**  
8 **residential rate programs?**

9 A. Yes. In Docket No. 18-WSEE-328-RTS (“328 Docket”), Westar Energy, Inc. (“Westar”)  
10 proposed two voluntary residential rate classes. However, at the time of this testimony,  
11 the Commission has not yet issued an order in the 328 Docket.

12  
13 **Q. Have these voluntary residential programs been approved in KCPL-Missouri or**  
14 **GMO?**

15 A. Not to my knowledge. KCPL’s application reports that it “is intending to offer these  
16 pilots in all its jurisdictions”<sup>1</sup> but does not report that the voluntary residential programs  
17 have been approved by the Missouri Public Service Commission.

18  
19 **Q. Please describe how a customer’s monthly bill will be determined in the proposed**  
20 **RD Pilot Program.**

21 A. KCPL’s RD Pilot Program includes a three-part rate: customer charge, demand rate, and

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<sup>1</sup> Direct Testimony of Marisol Miller, at page 23.



1 energy charge. KCPL has proposed that customers who participate in the RD Pilot  
2 Program pay the same customer charge as customers taking service from the standard  
3 residential rate. In addition to the customer charge, these customers will pay a demand  
4 rate, which is defined as the maximum fifteen minute demand, measured in KW, during  
5 the peak period within the billing period. The peak period is from 4:00 PM – 8:00 PM,  
6 except for weekends, New Year’s Day, Memorial Day, Independence Day, Labor Day,  
7 Thanksgiving Day, and Christmas Day. KCPL has proposed the demand charge be set at  
8 \$14.00 per KW during the summer season (May 16 – September 15) and \$11.50 during  
9 the winter season (September 16 – May 15). Finally, KCPL has proposed the energy  
10 charge be set at \$0.08126 per kWh during the summer season and \$0.05982 during the  
11 winter season.

12  
13 **Q. Please describe how a customer’s monthly bill will be determined in the proposed**  
14 **RDTOU Pilot Program.**

15 A. KCPL’s RDTOU Pilot Program also includes a three-part rate: customer charge, demand  
16 rate, and a three-tier energy charge based upon the participants’ time of use. The  
17 customer charge and demand charges are the same as proposed in the RD Pilot Program,  
18 however, the energy charge is time-differentiated into peak, off-peak, and super off-peak  
19 charges. KCPL has recommended participants in the RDTOU rate be charged the  
20 following summer season energy rates: \$0.19562 per kWh during peak hours (4:00 PM –  
21 8:00 PM), \$0.06521 per kWh during off-peak hours (6:00 AM – 4:00 PM; 8:00 PM –  
22 12:00 AM), and \$0.03260 per kWh during Super off-peak hours (12:00 AM – 6:00 AM).  
23 During the winter season the proposed energy rates are as follow: \$0.14405 per kWh

1 during peak hours, \$0.05363 per kWh during off-peak hours, and \$0.02259 per kWh  
2 during super off-peak hours.

3

4 **Q. Please describe how a customer's monthly bill will be determined in the proposed**  
5 **RTOU Pilot Program.**

6 A. KCPL's RTOU Pilot Program includes a two-part rate consisting of the monthly  
7 customer charge and a three-tier energy charge based upon the participant's time of use.  
8 The customer charge is the same as proposed in the RD and RDTOU Pilot Programs,  
9 however, the energy charge is differentiated into peak, off-peak, and super off-peak  
10 charges. KCPL has recommended participants in the RTOU rate be charged the following  
11 summer season energy rates: \$0.28061 per kWh during peak hours (4:00 PM – 8:00 PM),  
12 \$0.09354 per kWh during off-peak hours (6:00 AM – 4:00 PM; 8:00 PM – 12:00 AM),  
13 and \$0.04677 per kWh during Super off-peak hours (12:00 AM – 6:00 AM). During the  
14 winter season the proposed energy rates are as follow: \$0.20929 per kWh during peak  
15 hours, \$0.08202 per kWh during off-peak hours, and \$0.03455 per kWh during super off-  
16 peak hours.

17

18 **Q. Are you recommending changes to KCPL's proposed RD, RDTOU, and RTOU**  
19 **Pilot Programs?**

20 A. Yes. First, I recommend that the monthly customer charge, demand rates, and energy  
21 charges be approved consistent with the methodology recommended by CURB's class  
22 cost of service and rate design witness, Mr. Brian Kalcic. This includes a  
23 recommendation that the demand charge included in the RD and RDTOU pilot programs

1 be calculated based on a sixty-minute interval, as opposed to the fifteen-minute interval  
2 proposed by KCPL, consistent with Mr. Kalcic's recommendation concerning the  
3 Company's proposed RDG rate design.

4 Second, I recommend that customers who volunteer for the RD, RDTOU, and  
5 RTOU Pilot Programs be granted a one-time opt-out provision at any time during their  
6 participation in the programs. After a customer's initial one-year agreement ends, the  
7 customer's participation in the RD, RDTOU, or RTOU Pilot Program remains in effect as  
8 long as the RD, RDTOU, and RTOU Pilot Programs are in effect, or until the customer  
9 requests to be placed back into the residential standard tariff. For example, if a customer  
10 voluntarily signs up for the RD, RDTOU, or RTOU Pilot Program on November 1, the  
11 initial one-year agreement would terminate on October 31 of the following year. At that  
12 time, the customer can either opt-out of the RD, RDTOU, or RTOU Pilot Program and be  
13 placed back into the residential standard tariff, or be allowed to continue as a participant  
14 in the RD, RDTOU, or RTOU Pilot Program.

15 Third, during the pilot period I recommend KCPL provide a detailed annual  
16 report to Staff and CURB that includes the number of customers participating in the RD,  
17 RDTOU, and RTOU Pilot Programs, the number of customers that chose to opt-out of the  
18 RD, RDTOU, and RTOU Pilot Programs during the year, and a report regarding the  
19 participants' change in energy consumption. While the reports can be filed  
20 simultaneously, the data and information in the reports should be unique to each program.

21 Finally, I recommend that during the RD, RDTOU, and RTOU Pilot Programs  
22 any customer that utilizes the single opt-out provision to return to the residential standard  
23 tariff, not be permitted to switch back into the RD, RDTOU, and RTOU Pilot Programs

1 during the term of the pilot period.

2

3 **Q. Why do you recommend customers who participate in the RD, RDTOU, and RTOU**  
4 **Pilot Programs be granted a one-time opt-out provision?**

5 A. If KCPL's proposed RD, RDTOU, and RTOU Pilot Programs are approved by the  
6 Commission, the programs will be among the first residential demand rates in Kansas. As  
7 such, it stands to reason that there is a lack of experience with these types of tariffs for  
8 some customers, as well as the Commission, Staff, CURB and KCPL. Approving the RD,  
9 RDTOU, and RTOU Pilot Programs with a one-time opt-out provision will allow  
10 customers who after entering the program, discover they may not be able to adequately  
11 shift their demand to off-peak periods, to opt-out without being penalized by higher  
12 utility bills for another year. Additionally, the opt-out provision will allow all parties to  
13 better understand the impact the RD, RDTOU, and RTOU Pilot Programs have on  
14 customer choices regarding rate design options.

15

16 **V. LOST REVENUE RECOVERY**

17 **Q. Please describe KCPL's request to recover revenues lost as a result of customer**  
18 **participation in its RD, RDTOU, and RTOU Pilot Programs.**

19 A. KCPL is seeking Commission approval to defer the difference in revenue received from  
20 customers participating in the RD, RDTOU, and RTOU Pilot Programs as compared to  
21 what revenue otherwise would have been received if the customers remained on the  
22 residential standard rate. KCPL proposes to establish a deferred regulatory asset account  
23 to record the annual lost margins. The regulatory asset will accumulate over the period

1 from the time the customer switched rates until the next rate case when the overall  
2 revenues will be re-determined and the lost margins will be accounted for at that time.  
3 KCPL proposes the regulatory asset should allow recovery over a similar period as the  
4 time period between the cases. For example, if the next rate case were to occur five years  
5 from the Commission Order in this proceeding, then the amortization of the regulatory  
6 asset would also be for five years.

7  
8 **Q. Do you recommend the Commission approve KCPL's request to defer the**  
9 **difference in revenue for inclusion in its next rate case?**

10 A. No I do not. I recommend the Commission deny KCPL's request for two reasons. While  
11 the revenues lost as a result of customer participation in the RD, RDTOU, and RTOU  
12 Pilot Programs is uncertain at this time, the BMcD Residential Rate Strategy Study  
13 ("Study") estimates the lost revenues to be immaterial which, in my opinion, will not  
14 jeopardize KCPL's financial integrity. In the BMcD Study, several assumptions are  
15 tested and reported regarding the level of bill reduction achieved by participants and the  
16 resulting potential revenue loss for KCPL. The BMcD Study calculates that for KCPL  
17 Kansas, customers who volunteer for the RD, RDTOU, and RTOU Pilot Programs may  
18 experience an average reduction of \$1.29 per month.<sup>2</sup> Further, according to the report,  
19 "(a)ssuming 28 percent of all Residential [General Use] customers switch to the lowest  
20 rate based on their usage profile (perfect choice), the potential revenue loss would range  
21 from a high of 2.5 percent in KCP&L-GMO to a low of 1.2 percent in KCP&L Kansas. It  
22 is also possible that customers could switch to a rate that inadvertently causes an increase

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<sup>2</sup> KCPL Response to DR KCC-241, Burns & McDonnell Residential Rate Strategy Study, Table 5-7

1 to their monthly bills, however this was not assessed.”<sup>3</sup>

2  
3 **Q. Do you agree with the BMcD statement that KCPL will experience a 1.2% reduction**  
4 **in revenue as a result of customers switching to the RD, RDTOU, and RTOU Pilot**  
5 **Programs?**

6 A. No, I do not. First, the BMcD study acknowledges that it is possible that customers who  
7 enter into the RD, RDTOU, and RTOU Pilot Programs will experience an increase in  
8 their monthly bills. However, the BMcD Study did not assess this scenario. If some  
9 customers experience an increase in their monthly bills, it is possible that KCPL will not  
10 suffer from any overall revenue reduction as a result of offering the RD, RDTOU, and  
11 RTOU Pilot Programs. Instead, it is possible that KCPL may experience an increase in  
12 the overall level of revenue it receives from customers who voluntarily sign up for the  
13 RD, RDTOU, and RTOU Pilot Programs compared to what it would have received if  
14 customers remained on the Residential General Use rate tariff.

15 Second, the 1.2% revenue loss reported in the BMcD Study represents the average  
16 revenue change assuming 28% of all residential customers switched to the optimal rate.  
17 Because KCPL has requested the RD, RDTOU, and RTOU Pilot Programs be limited to  
18 1,000 customers each, KCPL could not achieve the penetration rate reported in the  
19 BMcD Study. Rather, using the BMcD Study’s estimate of \$1.29 per month in average  
20 bill savings, KCPL will experience an annual reduction in revenues of \$46,400 or 0.008%

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<sup>3</sup> KCPL Response to DR KCC-241, Burns & McDonnell Residential Rate Strategy Study, at page 5-7.

1 of the operating revenue reported by KCPL in this case.<sup>4</sup>

2  
3 **Q. Is there another reason why you recommend the Commission deny KCPL's request**  
4 **to defer the difference in revenue for inclusion in its next rate case?**

5 A. Yes. The Commission has previously rejected the recovery of lost revenues or margins.

6 In its Order in Docket No. 12-GIMX-337-GIV ("337 Docket"), the Commission stated:

- 7 • "(g)iven the current economic and regulatory environment, the Commission is  
8 disinclined to allow lost margin recovery,"
- 9 • "allowing recovery of lost margin creates a subsidy for energy efficiency  
10 programs that can violate the fundamental ratemaking principle of cost  
11 causation,"
- 12 • "under the principle of cost causation, the participants in the energy efficiency  
13 programs alone should be responsible for any reduction in revenue resulting from  
14 the energy efficiency program," and
- 15 • "(i)n general, the Commission will not allow recovery for lost margins."<sup>5</sup>

16  
17 **Q. Should the Commission's Order in the 337 Docket be used to evaluate KCPL's**  
18 **request to recover revenues lost as a result of participation in the RD, ROUT, or**  
19 **RDTOU programs?**

20 A. Yes. According to KCPL's Application, its proposed RD, ROUT, or RDTOU programs

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<sup>4</sup> \$1.29/month \* 12 months = \$15.48/year per customer. \$15.48/customer \* 1,000 customers = \$15,480 annual revenue lost per program. KCPL is proposing three programs, therefore the total amount of revenues lost is \$15,480\*3 = \$46,440. According to the application, KCPL's current operating revenue equals \$577,897,754.

<sup>5</sup> March 6, 2013, Docket No. 12-GIMX-3237-GIV, Order.

1 are Demand Side Management programs, designed to shift a customer's use to non-peak  
2 hours. Therefore, the Commission's previous orders regarding lost revenue recovery  
3 mechanisms is relevant and should be considered in this proposal.

4  
5 **VI. DEMAND-SIDE MANAGEMENT PILOT PROGRAMS**

6 **Q. Please describe KCPL's proposed Demand-Side Management ("DSM") Programs.**

7 A. KCPL has proposed two DSM programs be approved by the Commission in conjunction  
8 with its voluntary residential pilot rate programs: Residential Smart Thermostat Pilot  
9 Program ("Thermostat Program") and Residential Home Energy Report Pilot Program  
10 ("Home Energy Report"). According to the Application, KCPL has recommended that  
11 each participant in the RD, RDTOU, and RTOU Pilot Programs be provided the  
12 opportunity to receive a Nest Smart Thermostat in order to educate the participant about  
13 how to better manage their energy usage in conjunction with the RD, RDTOU, and  
14 RTOU Pilot Programs. KCPL also suggests that the proposed Thermostat Program will  
15 reduce year-round energy usage and peak demand by enabling daily set point options for  
16 programming as well as home and away settings.

17 Similar to the proposed Thermostat Program, the Residential Home Energy  
18 Report program is a behavioral energy efficiency and educational program that will be  
19 offered to customers who participate in the RD, RDTOU, and RTOU Pilot Programs. The  
20 Home Energy Report is a monthly report that provides participants with a comparison of  
21 their energy usage when compared to neighbors and similar homes, a comparison of the  
22 participants' energy usage over time, and other various energy efficiency tips. According  
23 to the Application, KCPL suggests that customers who participate in the RD, RDTOU,



1 and RTOU Pilot Programs will achieve energy and demand savings through reductions  
2 facilitated by the Home Energy Report.

3

4 **Q. Why is KCPL proposing the Thermostat Program and Home Energy Report be**  
5 **approved in its application?**

6 A. KCPL has recommended the Thermostat Program and the Home Energy Report  
7 programs be approved as educational tools for its customers that participate in the RD,  
8 RDTOU, and RTOU Pilot Programs. According to the KCPL witness Ms. Kimberly  
9 Winslow “(i)t is important that customers are provided with education tools to better help  
10 them manage their residential time-of-use, demand, and time-of-use plus demand rates  
11 and; offering the Residential Smart Thermostat Pilot Program and Residential Home  
12 Energy Report Pilot Program is an effective way to start this education.”<sup>6</sup>

13

14 **Q. If approved as presented by KCPL, what is the estimated cost of the proposed**  
15 **Thermostat Program and Home Energy Report?**

16 A. The Thermostat Program has a five year budget of \$1,654,354.<sup>7</sup> The Home Energy  
17 Report has a five year budget of \$365,000.<sup>8</sup> If approved, over the next five years, the  
18 proposed Thermostat Program and Home Energy Report would cost ratepayers  
19 \$2,019,354, while directly benefiting just 3,000 residential customers.

20

21

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<sup>6</sup> Direct Testimony of Kimberly Winslow, at page 14.

<sup>7</sup> Direct Testimony of Kimberly Winslow, at Exhibit KHW-1.

<sup>8</sup> *Id.*

1 **Q. Did KCPL provide a benefit-cost analysis of its proposed DSM programs?**

2 A. No, because KCPL classified the programs as educational programs it was not required to  
3 conduct a cost effectiveness test.  
4

5 **Q. In your opinion, should KCPL have provided a benefit-cost analysis of its proposed  
6 DSM programs?**

7 A. For the proposed Thermostat Program, yes. KCPL's application identifies that the  
8 program "reduces year-round energy usage and peak demand" and that the participants in  
9 the RD, RDTOU, and RTOU Pilot Programs will achieve "energy and demand savings  
10 through reductions facilitated by the smart thermostat".<sup>9</sup> Based on this language it is clear  
11 that KCPL anticipates customers who receive the free smart thermostat will achieve year-  
12 round energy and demand savings. These savings should have been estimated and KCPL  
13 should have demonstrated that the savings achieved from the 3,000 eligible customers  
14 will exceed the estimated program costs of \$1,654,354. In my opinion, KCPL's choice to  
15 designate the Thermostat Program as an educational program is an effort to avoid the  
16 rules that require cost-effectiveness tests for educational programs.  
17

18 **Q. Should KCPL have provided a cost-benefit analysis for the proposed Home Energy  
19 Report program?**

20 A. No. I agree with KCPL that the Home Energy Report program is an education program,  
21 and therefore is not required to pass cost-effectiveness tests.

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<sup>9</sup> Direct Testimony of Kimberly Winslow, at Exhibit KHW-1.

1 **Q. Besides the two DSM education programs proposed in the Application, does KCPL**  
2 **currently offer other DSM educational programs?**

3 A. Yes. KCPL currently offers three educational DSM programs in Kansas: Home Energy  
4 Analyzer, Business Energy Analyzer, and Building Operator Certification.<sup>10</sup>  
5

6 **Q. Please describe the Home Energy Analyzer Program.**

7 A. The Home Energy Analyzer is a program that allows Kansas residential customers with  
8 Internet capability to electronically access their billing information and compare their  
9 usage on a daily, weekly, monthly or annual basis. The Home Energy Analyzer analyzes  
10 the percentage of the customer's usage comprised by each end use and provides  
11 information on ways the customer can save energy by end use through a searchable  
12 resource center. Additionally, the Home Energy Analyzer includes a home comparison  
13 that displays a comparison of the customer's home versus an average similar home.<sup>11</sup>  
14

15 **Q. Is there a measurable difference between the Commission-approved Home Energy**  
16 **Analyzer and the proposed Home Energy Report?**

17 A. No. In fact, most of the information presented in the proposed Home Energy Reports is  
18 available by using the Home Energy Analyzer. According to the Company's response to  
19 KCC Staff Data Request No. 296, the Home Energy Analyzer "provides customers with  
20 six pages of content to interact with including: (1) an energy dashboard/Compare to

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<sup>10</sup> In addition its three educational DSM programs, KCPL also offers a low-income weatherization program and a Programmable Thermostat program. In Docket No. 18-KCPE-124-TAR, these programs were extended through February, 2020.

<sup>11</sup> Docket No. 18-KCPE-124-TAR, *Application*, at Attachment 2.

1 Neighbor page; (2) an Online Home Energy Audit tool/What Uses Most; (3) a deeper  
2 exploration of the customer's energy use and neighbor comparison page/Energy Trends;  
3 (4) an energy efficiency tips library featuring several hundred energy savings tips/Ways  
4 to Save; (5) a page to create an energy-saving plan leveraging the Ways to Save page/My  
5 Plan; and a My Settings page to update general information about their home; these  
6 inputs feed into various pages within the tool to surface more personalized and accurate  
7 information. The information available through the Energy Analyzer tool is similar to  
8 what is presented to customers via Home Energy Reports. The Energy Analyzer tool has  
9 deeper interactive engagement options like What Uses Most and Energy Trends, but most  
10 of the information presented on Home Energy Reports can also be found on the online  
11 portal.”

12  
13 **Q. Do you recommend the Commission approve KCPL's proposed DSM programs?**

14 A. No, I do not for four reasons. First, as I previously testified, the proposed Thermostat  
15 Program is not an educational program intended to educate customers, but rather,  
16 according to KCPL's Application, is a DSM tool intended to reduce year-round demand  
17 and energy savings. As a result, KCPL should have included a full benefit-cost test to  
18 evaluate the cost-effectiveness of the proposed Thermostat Program and to justify its  
19 proposed \$1.6 million budget. Absent such analysis performed with reasonable inputs, it  
20 is impossible to determine whether the proposed DSM program will generate system-  
21 wide benefits that exceed the costs of the program.

22 Second, as I testified, the Home Energy Report proposal is duplicative of a  
23 current DSM education offered by KCPL – the Home Energy Analyzer. Because all of

1 KCPL's customers are eligible to participate in the Home Energy Analyzer program, I do  
2 not recommend the Commission approve a duplicative program that offers virtually the  
3 same information to 3,000 customers.

4 Third, I recommended KCPL provide detailed reports regarding participation and  
5 usage patterns for customers who choose to participate in the proposed RD, RDTOU, and  
6 RTOU Pilot Programs so that when the pilot programs end, the Commission will be able  
7 to clearly evaluate the impact of demand and time-of-use rates on customers. Adding  
8 additional measures, such as a Nest thermostat, will blur the lines between energy and  
9 demand savings achieved as a result of customer response to price signals, and the  
10 savings achieved from the installation of a free smart thermostat, making it difficult, if  
11 not impossible, to determine what caused or assisted in the reduction of demand or  
12 energy.

13 Finally, KCPL's budget for its proposed DSM energy-efficiency pilot programs  
14 does not adhere to the Commission's guidance provided in Docket No. 08-GIMX-442-  
15 GIV ("442 Docket"). In the Commission's Order Following Collaborative in the 442  
16 Docket, the Commission determined a "5% level is useful as a guideline for total energy  
17 efficiency portfolio funding devoted to educational programs."<sup>12</sup> KCPL's current  
18 Commission-approved portfolio of energy efficiency programs has an approved budget of  
19 \$887,049 for the period from 2018-2020. Of the current approved budget, KCPL's  
20 budget devoted to educational programs is 27% of its total energy efficiency portfolio.<sup>13</sup>

21 Adding the proposed Thermostat Program and the Home Energy Report, would cause

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<sup>12</sup> 08-GIMX-442-GIV, *Order Following Collaborative*, at ¶32.

<sup>13</sup> 18-KCPE-124-TAR, *Order Approving*, Attachment A, page 4.

1 KCPL's budget dedicated to educational programs to move even farther from the  
2 Commission's established guidelines.

3

4 **Q. Besides the proposed Thermostat Program and Home Energy Report, are there**  
5 **other educational options KCPL can offer its customers to help them manage their**  
6 **demand and time-of-use?**

7 A. Yes. KCPL witness Mr. Bradley Lutz provides testimony regarding the Company's plans  
8 for an educational program to be offered in conjunction with its proposed three-part  
9 Residential Distributed Generation ("RDG") rate. According to Mr. Lutz's testimony,  
10 KCPL is developing and planning to offer education programs to ensure that Residential  
11 DG customers can understand the price signals associated with the demand rate design.  
12 Mr. Lutz's testimony refers to educational efforts such as web-based content that includes  
13 tips, calculators, graphics and videos, in addition to billing inserts, bill messages, and  
14 other print alternative, as well as pamphlets prepared by Arizona Public Service that  
15 provide "easy to understand explanations of demand and ways to save under the demand  
16 rate."<sup>14</sup> While Mr. Lutz testifies that KCPL is continuing to work on the exact design and  
17 elements of the education materials, it appears that the identified educational efforts are  
18 geared towards DG customers, and not intended to educate residential customers who  
19 voluntarily sign up for the RD, RDTOU, and RTOU Pilot Programs. Because KCPL's  
20 proposed RDG rate is a three-part demand rate structured similarly to the RD and  
21 RDTOU programs, I recommend these educational tools be utilized instead of the  
22 proposed Thermostat Program and Home Energy Report.

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<sup>14</sup> Direct Testimony of Bradley D. Lutz, at page 54.

1 **VII. RESIDENTIAL STANDARD DISTRIBUTED GENERATION RATE**

2 **Q. Please describe KCPL's proposed restructuring of the Residential Standard**  
3 **Distributed Generation ("RDG") rate.**

4 A. KCPL is proposing a mandatory three-part rate design for residential DG customers. The  
5 proposed RDG rate would be mandatory for residential customers who install DG after  
6 the Commission issues an order in this proceeding. As part of the three-part rate, KCPL is  
7 proposing that customers taking service under the RDG tariff will be charged a \$15.18  
8 basic service fee (this is the same basic service fee KCPL proposed for all residential  
9 customers), a demand charge of \$9.00 per kW during the summer period and \$2.00 per  
10 kW during the winter period, and an energy charge of \$0.08683 per kWh during the  
11 summer period and \$0.06704 per kWh during the winter period.

12

13 **Q. How will the DG customer's monthly demand be determined?**

14 A. The residential DG customer's monthly demand will be calculated in the same way as the  
15 proposed RD, RDTOU, or RTOU Pilot Programs. The customer's demand is defined as  
16 the maximum fifteen minute demand, measured in KW, during the peak period within the  
17 billing period. The peak period is from 4:00 PM – 8:00 PM, except for weekends, New  
18 Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and  
19 Christmas Day.

20

21 **Q. Does CURB recommend approval of KCPL's proposed RDG rates?**

22 A. No. In his direct testimony, CURB witness Mr. Brian Kalcic sets forth the reasons CURB  
23 recommends the Commission deny KCPL's proposed RDG rates. Alternatively, if the

1 Commission decides to approve KCPL's RDG rate tariff, Mr. Kalcic provides  
2 recommendations with respect to the customer charge level, the determination of the  
3 RDG monthly billing demand, and the scaleback of rates.

4  
5 **Q. If the Commission decides to approve KCPL's proposed RDG tariff, do you have**  
6 **additional recommendations regarding the RDG tariff?**

7 A. Yes, I have four recommendations. First, I recommend that the monthly customer charge,  
8 demand rates, and energy charges be approved consistent with the methodology  
9 recommended by CURB's class cost of service and rate design witness, Mr. Brian Kalcic.  
10 This includes Mr. Kalcic's recommendation that the demand charge included in the RDG  
11 program be calculated based on a sixty-minute interval, as opposed to the fifteen-minute  
12 interval proposed by KCPL.

13 Second, the Commission should permit prospective RDG customers that have  
14 signed a contract to install DG equipment before the effective date of the new rates in this  
15 proceeding to take service on KCPL's residential standard service rate schedule, so as not  
16 to invalidate the economics underlying the customer's decision to install DG equipment.  
17 It is likely that a residential customer who chooses to make the investment in DG units,  
18 may do so based upon the existing KCPL residential rates at the time of their investment.  
19 Therefore if the Commission approves KCPL's request to implement a three-part demand  
20 rate for DG customers, the new rates should not apply to customers who can produce a  
21 contract to install DG equipment that was executed prior to the effective date of new rates  
22 in this proceeding.

23 Third, I recommend KCPL provide a detailed annual report to Staff and CURB



1 that includes the number of residential DG customers taking service from the RDG, the  
2 total demand and energy charges paid during the year, analysis regarding the customers'  
3 change in energy consumption, and a report of the bill impacts for each RDG customer.  
4 Previously in my testimony, I recommended detailed reporting requirements for Westar's  
5 proposed RD, RDTOU, and RTOU Pilot Programs. While the RDG, RD, RDTOU, and  
6 RTOU Pilot Program reports can be filed simultaneously, the data and information in the  
7 reports should be unique to each tariff.

8 Finally, I recommend that KCPL file a new cost of service study for the purpose  
9 of examining potential rate design alternatives for residential DG customer in its first  
10 general rate case following the five-year moratorium that was approved in Docket 18-  
11 KCPE-095-MER.

## 12

### 13 **VIII. RECOMMENDATIONS**

#### 14 **Q. Please summarize the recommendations made in your testimony.**

15 A, Based on my analysis of KCPL's Application and discovery issued in this case, my  
16 recommendations are as follows:

17 1. I recommend KCPL's voluntary Residential Demand Service Pilot Program,  
18 Residential Time of Use Pilot Program, and Residential Demand Service Plus  
19 Time of Use Pilot Program be approved with the following conditions:

- 20 • the monthly customer charge, demand rates, and energy charges be  
21 approved consistent with the methodology recommended by CURB's  
22 class cost of service and rate design witness, Mr. Brian Kalcic.
- 23 • customers be granted a one-time opt-out provision at any time during their

- 1 participation in the voluntary programs;
- 2 • after a customer's initial one-year agreement ends, the customer's
- 3 participation in the voluntary rate program will automatically continue
- 4 until such time as the customer requests to opt-out of the voluntary rate
- 5 class and instead be placed back into the residential standard tariff;
- 6 • KCPL will submit an annual report to the Commission Staff ("Staff") and
- 7 CURB that includes the number of customers participating in the
- 8 voluntary programs, the number of customers that chose to opt-out, and a
- 9 report regarding the participants' change in energy consumption; and
- 10 • any customer that utilizes the opt-out provision to return to the residential
- 11 standard tariff, should not be permitted to switch back into the voluntary
- 12 rate during the term of the pilot period.
- 13 2. I recommend the Commission deny KCPL's proposal to defer the difference in
- 14 revenue received from customers participating in the voluntary rate programs as
- 15 compared to what revenue otherwise would have been received if the customers
- 16 remained on the residential standard rate for inclusion in its next rate case.
- 17 3. I recommend the Commission deny KCPL's proposed educational Demand Side
- 18 Management Programs to be offered in conjunction with the voluntary residential
- 19 rate programs.
- 20 4. Consistent with the recommendation presented by CURB witness Mr. Brian
- 21 Kalcic, I recommend the Commission reject KCPL's proposed Demand Service
- 22 for Residential Distributed Generation ("RDG") tariff. Alternatively, if the
- 23 Commission decides to approve KCPL's proposed RDG tariff, I recommend the

1 RDG tariff be approved with the following conditions:

- 2 • The Commission should approve the monthly customer charge, demand  
3 rates, and energy charges consistent with the methodology recommended  
4 by CURB's class cost of service and rate design witness, Mr. Brian  
5 Kalcic;
- 6 • The Commission should permit prospective RDG customers that have  
7 signed a contract to install DG equipment before the effective date of the  
8 new rates in this proceeding to take service on KCPL's residential  
9 standard service rate schedule, so as not to invalidate the economics  
10 underlying the customer's decision to install DG equipment;
- 11 • KCPL should provide a detailed annual report to Staff and CURB that  
12 includes the number of residential DG customers taking service from  
13 Schedule RDG, the demand and energy charges during the year, analysis  
14 regarding the customers' change in energy consumption, and a report of  
15 the bill impacts for each RDG customer; and
- 16 • KCPL will file a new cost of service study for the purpose of examining  
17 potential rate design alternatives for residential DG customers in its first  
18 general rate case following the five-year moratorium.

19

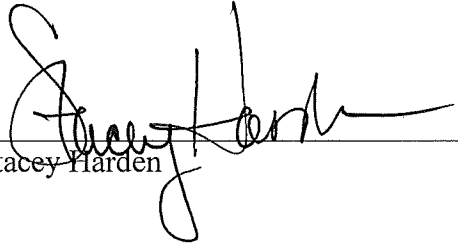
20 **Q. Does this conclude your testimony?**

21 A. Yes, it does.

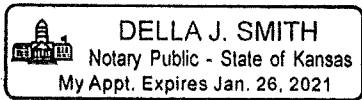
**VERIFICATION**

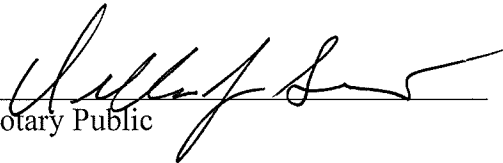
STATE OF KANSAS                    )  
  )    ss:  
COUNTY OF SHAWNEE            )

I, Stacey Harden, of lawful age and being first duly sworn upon my oath, state that I am a Senior Regulatory Analyst for the Citizens' Utility Ratepayer Board; that I have read and am familiar with the above and foregoing document and attest that the statements therein are true and correct to the best of my knowledge, information, and belief.

  
\_\_\_\_\_  
Stacey Harden

SUBSCRIBED AND SWORN to before me this 12<sup>th</sup> day of September, 2018.



  
\_\_\_\_\_  
Notary Public

My Commission expires: 01-26-2021.

**APPENDIX A**

**Referenced Data Requests**

**KCC-241\***

**KCC-296**

**\*Attachments Voluminous – only included partial response**

KCPL KS  
Case Name: 2018 Kansas Rate Case  
Case Number: 18-KCPE-480-RTS

Response to Prince Darren Interrogatories - KCC\_20180703  
Date of Response: 07/11/2018

Question:241

Residential Rate Design Strategy Study

Please provide a copy of the Residential Rate Design Strategy Study KCP&L and Burns & McDonnell conducted. Also, please include any workpapers associated with the study.

Number of Attachments:

Response:

Attached below is the KCP&L Residential Rate Design Strategy Study that was used to inform the development of the proposed rate designs. Also attached below are the associated workpapers.

Information provided by: Marisol Miller, Regulatory Affairs

Attachments:

*QR\_241-KCP&L Residential Rate Design Strategy.pdf*  
*QR\_241-KCP&L\_Rate Option Model\_KS-15.xls*  
*QR\_241-KCP&L\_Rate Option Model\_KS + DR\_15.xls*  
*QR\_241-Verification.pdf*

**Table 5-4: KCP&L Kansas - Optional Residential Rate Designs**

Existing		Existing		New		New		New	
General use Rate		Space Heating Rate		Optional Demand Rate		Optional TOU Energy Rate		Optional TOU Energy + Demand Rate	
	Price		Price		Price		Price		Price
Customer Charge (\$/mo)	\$14.00	Customer Charge (\$/mo)	\$14.00	Customer Charge (\$/mo)	\$14.00	Customer Charge (\$/mo)	\$14.00	Customer Charge (\$/mo)	\$14.00
Energy Charges (\$/kWh)		Energy Charges (\$/kWh)		Energy Charges (\$/kWh)		Energy Charges (\$/kWh)		Energy Charges (\$/kWh)	
Summer	\$0.108	Summer	\$0.108	Summer	\$0.098	Summer Peak	\$0.220	Summer Peak	\$0.181
						Summer Off Peak	\$0.082	Summer Off Peak	\$0.044
						Summer Super Off Peak	\$0.055	Summer Super Off Peak	\$0.016
Winter, up to 2000	\$0.084	Winter, up to 600	\$0.075	Winter	\$0.030	Winter Peak	\$0.249	Winter Peak	\$0.222
Winter 2001 - 2000	\$0.084	Winter 601 - 1000	\$0.075			Winter Off Peak	\$0.072	Winter Off Peak	\$0.045
Winter, 2001 +	\$0.084	Winter, 1001 +	\$0.066			Winter Super Off Peak	\$0.044	Winter Super Off Peak	\$0.017
Tier 1 Max kWh	N/A	Tier 1 Max kWh	600	Tier 1 Max kWh	N/A	Tier 1 Max kWh	N/A	Tier 1 Max kWh	N/A
Tier 2 Max kWh	N/A	Tier 2 Max kWh	1,000	Tier 2 Max kWh	N/A	Tier 2 Max kWh	N/A	Tier 2 Max kWh	N/A
Demand Charges (\$/kW)		Demand Charges (\$/kW)		Demand Charges (\$/kW)		Demand Charges (\$/kW)		Demand Charges (\$/kW)	
Summer Demand (\$/kW)	N/A	Summer Demand (\$/kW)	N/A	Summer Demand (\$/kW)	\$9.00	Summer Demand (\$/kW)	N/A	Summer Demand (\$/kW)	\$9.00
Winter Demand (\$/kW)	N/A	Winter Demand (\$/kW)	N/A	Winter Demand (\$/kW)	\$2.00	Winter Demand (\$/kW)	N/A	Winter Demand (\$/kW)	\$2.00
Summer Demand	N/A	Summer Demand	N/A	Summer Demand	On Peak	Summer Demand	N/A	Summer Demand	On Peak
Winter Demand	N/A	Winter Demand	N/A	Winter Demand	On Peak	Winter Demand	N/A	Winter Demand	On Peak
Current Default General Use Rate Small Use Customers		Current Default Space Heat Rate Frozen Space Heat Rate		Optimal Space Heat Rate Default for High Use Customers Revenue neutral to GU and SH classes		Optimal EV Rate Available for all customers Revenue neutral for GU class		Optimal Space Heat + EV Rate Default for High Use Customers Revenue neutral for GU and SH classes	

1. For this analysis, summer months are assumed to be from June 1 to September 30 for optional rates.
2. TOU Peak from 4 - 8 pm. Off Peak from 6 am to 4 pm and 8 pm to 12 am. Super Off Peak from 12 am to 6 am.
3. Max monthly on-peak demand is billed based on 15 min maximum measured demand from 4 - 8 pm.
4. Existing rates are based on Residential rates prior to June 21, 2017 .
5. New optional demand rates are set to recover the same revenues as the existing GU and SH rates.

### 5.4 Bill Impacts and Self Selection Analysis

For each of the rates, monthly bills were calculated for the load profiles in the load research group data set. When necessary, high usage customer load profiles, deemed to be outliers to the data set, were removed from the data sets to arrive at an adjusted load research data set that is representative of the class in total. Billing demand determinants were based on 15-minute interval data. The annual change in each customer’s bill was calculated to determine how each customer would be impacted if they were to switch to the new optional rate design. The potential bill impact of each customer in the load research groups switching to each of the new rates for KCP&L GMO is provided in the figures on the following page. Similar bill impacts were also developed for KCP&L-Missouri and KCP&L Kansas utility jurisdictions. When customers are offered new choices between rates, their selection may be influenced by a variety of factors including their expected bill on each rate, their ability to respond to the price signal, their risk aversion to a new rate, and their time dedicated to analyzing their electric rates. Because the utility does not know which customers will select which rates and if customers will select the rate that provides the lowest bill, the level of revenue change is not known with certainty.

The analysis considers the scenario in which customers select the rate that provides them with the lowest annual bill based on perfect knowledge of their energy usage profile without any changes in behavior. From a revenue perspective, this “perfect choice” scenario is the worst-case scenario that could be experienced by the utility. Based on the rates developed, the maximum potential revenue loss from

Residential GU customer switching could range from a high of 8.8 percent in GMO to a low of 4.2 percent in KCP&L-Kansas.

In addition to the “perfect choice” scenario, several additional scenarios were also developed to test the range of potential outcomes. The “baseline” customer switching scenario assumes that approximately 28 percent of all customers would switch to the rate that provides them with the lowest bill as opposed to the “perfect choice” as shown on the following pages. The “baseline” scenario is represented as the expected average bill. Assuming 28 percent of all Residential GU customers switch to the lowest rate based on their usage profile (perfect choice), the potential revenue loss would range from a high of 2.5 percent in KCP&L-GMO to a low of 1.2 percent in KCP&L Kansas. It is also possible that customers could switch to a rate that inadvertently causes an increase to their monthly bills, however this was not assessed.

**Figure 5-1: GMO General Use Monthly Bill Change from Potential Rate Switching**

BILL COMPARISONS AND REVENUE ATTRITION ESTIMATES										Penetration 28%		
GMO GU CUSTOMERS										Expected		
	General Use	General Use	Demand	TOU	TOU + Demand	Perfect Choice	% Change	\$/mon change	Perfect Choice	Avg. Bill	\$/mon change	\$/yr change
SC0066	\$ 952.01	\$ 952.01	\$ 446.62	\$ 971.43	\$ 431.91	\$ 431.91	-54.6%	(43.34)	TOU + Demand	\$ 806.38	\$ (12.14)	\$ (145.63)
SC0069	\$ 1,838.91	\$ 1,838.91	\$ 1,467.55	\$ 1,607.82	\$ 1,468.03	\$ 1,467.55	-20.2%	(30.95)	Demand	\$ 1,734.93	\$ (8.66)	\$ (103.98)
SC0074	\$ 1,616.00	\$ 1,616.00	\$ 1,286.93	\$ 1,552.96	\$ 1,272.23	\$ 1,272.23	-21.3%	(28.65)	TOU + Demand	\$ 1,519.75	\$ (8.02)	\$ (96.25)
SC0067	\$ 1,722.03	\$ 1,722.03	\$ 1,379.92	\$ 1,729.45	\$ 1,383.39	\$ 1,379.92	-19.9%	(28.51)	Demand	\$ 1,626.24	\$ (7.98)	\$ (95.79)
SC0089	\$ 1,369.90	\$ 1,369.90	\$ 1,081.67	\$ 1,265.60	\$ 1,061.01	\$ 1,061.01	-22.5%	(25.74)	TOU + Demand	\$ 1,283.41	\$ (7.21)	\$ (86.49)
SD0037	\$ 1,626.59	\$ 1,626.59	\$ 1,370.38	\$ 1,634.43	\$ 1,370.58	\$ 1,370.38	-15.8%	(21.35)	Demand	\$ 1,554.85	\$ (5.98)	\$ (71.74)
SD0041	\$ 1,338.65	\$ 1,338.65	\$ 1,155.17	\$ 1,309.41	\$ 1,110.78	\$ 1,110.78	-17.0%	(18.99)	TOU + Demand	\$ 1,274.85	\$ (5.32)	\$ (63.80)
SC0098	\$ 1,614.01	\$ 1,614.01	\$ 1,474.65	\$ 1,694.04	\$ 1,502.73	\$ 1,474.65	-8.6%	(11.61)	Demand	\$ 1,574.99	\$ (3.25)	\$ (39.02)
SC0066	\$ 1,841.64	\$ 1,841.64	\$ 1,705.24	\$ 1,889.16	\$ 1,707.44	\$ 1,705.24	-7.4%	(11.37)	Demand	\$ 1,803.45	\$ (3.18)	\$ (38.19)
SC0062	\$ 1,391.93	\$ 1,391.93	\$ 1,298.37	\$ 1,423.55	\$ 1,293.03	\$ 1,298.37	-6.7%	(7.80)	Demand	\$ 1,365.73	\$ (2.18)	\$ (26.20)
SC0058	\$ 1,182.80	\$ 1,182.80	\$ 1,091.41	\$ 1,168.60	\$ 1,090.98	\$ 1,090.98	-7.8%	(7.65)	TOU + Demand	\$ 1,157.09	\$ (2.14)	\$ (25.71)
SC0076	\$ 1,115.75	\$ 1,115.75	\$ 1,028.76	\$ 1,028.76	\$ 1,028.76	\$ 1,028.76	-7.8%	(7.25)	TOU	\$ 1,091.39	\$ (2.03)	\$ (24.36)
SD0034	\$ 878.80	\$ 878.80	\$ 798.91	\$ 814.11	\$ 793.20	\$ 793.20	-9.8%	(7.14)	TOU + Demand	\$ 854.90	\$ (2.00)	\$ (23.99)
SD0042	\$ 648.87	\$ 648.87	\$ 571.38	\$ 650.06	\$ 578.39	\$ 571.38	-11.9%	(6.46)	Demand	\$ 627.18	\$ (1.81)	\$ (21.70)
SD0039	\$ 809.92	\$ 809.92	\$ 834.03	\$ 737.10	\$ 823.31	\$ 737.10	-9.0%	(6.07)	TOU	\$ 789.53	\$ (1.70)	\$ (20.39)
SC0092	\$ 845.79	\$ 845.79	\$ 1,000.00	\$ 762.10	\$ 888.60	\$ 782.10	-7.5%	(5.31)	TOU	\$ 827.96	\$ (1.49)	\$ (17.83)
SC0091	\$ 1,462.10	\$ 1,462.10	\$ 1,408.49	\$ 1,437.95	\$ 1,409.04	\$ 1,402.94	-4.1%	(5.00)	TOU + Demand	\$ 1,445.28	\$ (1.40)	\$ (16.82)
SC0080	\$ 1,389.47	\$ 1,389.47	\$ 1,365.63	\$ 1,333.76	\$ 1,356.51	\$ 1,333.76	-4.0%	(4.64)	TOU	\$ 1,373.87	\$ (1.50)	\$ (15.60)
SC0059	\$ 583.22	\$ 583.22	\$ 532.19	\$ 558.07	\$ 530.03	\$ 530.03	-9.1%	(4.43)	TOU + Demand	\$ 568.35	\$ (1.24)	\$ (14.88)
SD0038	\$ 1,089.74	\$ 1,089.74	\$ 1,038.52	\$ 1,077.91	\$ 1,038.83	\$ 1,036.83	-4.9%	(4.41)	TOU + Demand	\$ 1,074.93	\$ (1.23)	\$ (14.81)
SC0072	\$ 1,398.56	\$ 1,398.56	\$ 1,384.43	\$ 1,380.04	\$ 1,375.34	\$ 1,364.43	-2.4%	(2.84)	Demand	\$ 1,389.00	\$ (0.80)	\$ (9.56)
SC0071	\$ 1,096.58	\$ 1,096.58	\$ 1,213.40	\$ 1,062.45	\$ 1,214.54	\$ 1,062.45	-3.1%	(2.84)	TOU	\$ 1,087.02	\$ (0.80)	\$ (9.56)
SC0073	\$ 1,517.13	\$ 1,517.13	\$ 1,528.86	\$ 1,483.10	\$ 1,534.12	\$ 1,483.10	-2.2%	(2.84)	TOU	\$ 1,507.60	\$ (0.79)	\$ (9.53)
SC0075	\$ 1,047.87	\$ 1,047.87	\$ 1,026.85	\$ 1,024.05	\$ 1,028.84	\$ 1,024.05	-2.3%	(1.99)	TOU	\$ 1,041.27	\$ (0.56)	\$ (6.70)
SC0082	\$ 1,727.98	\$ 1,727.98	\$ 1,708.71	\$ 1,838.74	\$ 1,734.50	\$ 1,734.50	-1.2%	(1.77)	Demand	\$ 1,722.02	\$ (0.50)	\$ (5.96)
SD0036	\$ 728.37	\$ 728.37	\$ 655.00	\$ 709.65	\$ 680.73	\$ 709.65	-2.5%	(1.54)	TOU	\$ 723.19	\$ (0.43)	\$ (5.19)
SC0064	\$ 378.82	\$ 378.82	\$ 474.57	\$ 360.77	\$ 472.46	\$ 360.77	-4.8%	(1.50)	TOU	\$ 373.76	\$ (0.42)	\$ (5.05)
SC0079	\$ 1,469.42	\$ 1,469.42	\$ 1,469.86	\$ 1,455.19	\$ 1,481.13	\$ 1,455.19	-1.0%	(1.19)	TOU	\$ 1,465.43	\$ (0.33)	\$ (3.98)
SC0070	\$ 1,177.24	\$ 1,177.24	\$ 1,435.64	\$ 1,163.32	\$ 1,437.93	\$ 1,163.32	-1.2%	(1.16)	TOU	\$ 1,173.34	\$ (0.32)	\$ (3.90)
SC0063	\$ 897.63	\$ 897.63	\$ 966.55	\$ 867.84	\$ 970.20	\$ 867.84	-1.1%	(0.82)	TOU	\$ 894.89	\$ (0.23)	\$ (2.74)
SC0088	\$ 1,551.67	\$ 1,551.67	\$ 1,785.68	\$ 1,547.69	\$ 1,751.11	\$ 1,547.69	-0.3%	(0.33)	TOU	\$ 1,550.56	\$ (0.09)	\$ (1.11)
SC0101	\$ 974.68	\$ 974.68	\$ 1,030.74	\$ 1,127.04	\$ 1,099.17	\$ 974.68	0.0%	-	General Use	\$ 974.68	\$ -	\$ -
SC0068	\$ 1,175.57	\$ 1,175.57	\$ 1,447.17	\$ 1,208.48	\$ 1,472.80	\$ 1,175.57	0.0%	-	General Use	\$ 1,175.57	\$ -	\$ -
SC0065	\$ 1,217.25	\$ 1,217.25	\$ 1,480.79	\$ 1,270.20	\$ 1,475.17	\$ 1,217.25	0.0%	-	General Use	\$ 1,217.25	\$ -	\$ -
GU Profiles	\$ 41,677	\$ 41,677	\$ 40,637	\$ 41,441	\$ 40,692	\$ 38,011				\$ 40,650.65	\$ (85.54)	\$ (1,026.45)
% Change		0.0%	-2.5%	-0.6%	-2.4%	-8.8%				-2.46%		



**Figure 5-2: GMO Electric Space Heating Monthly Bill Change from Potential Rate Switching**

BILL COMPARISONS AND REVENUE ATTRITION ESTIMATES											Penetration 28%		
GMO-SH CUSTOMERS											Expected		
	Space Heating	General Use	Demand	TOU	TOU+Demand	Perfect Choice	% Change	\$/mon change	Perfect Choice	Avg. Bill	\$/mon change	\$/yr change	
SC0010	\$ 1,551.57	\$ 1,746.00	\$ 1,196.15	\$ 1,814.18	\$ 1,171.48	\$ 1,171.48	-24.5%	(\$ 31.67)	TOU+Demand	\$ 1,445.15	(\$ 8.87)	(\$ 106.43)	
SC0028	\$ 2,324.01	\$ 2,584.13	\$ 1,939.19	\$ 2,528.41	\$ 1,990.75	\$ 1,990.75	-14.3%	(\$ 27.77)	TOU+Demand	\$ 2,230.70	(\$ 7.78)	(\$ 93.31)	
SC0032	\$ 1,285.21	\$ 1,443.91	\$ 1,033.74	\$ 1,298.47	\$ 1,106.63	\$ 1,093.74	-14.3%	(\$ 15.12)	Demand	\$ 1,214.40	(\$ 4.23)	(\$ 50.81)	
SC0022	\$ 1,820.43	\$ 2,028.40	\$ 1,657.44	\$ 1,980.84	\$ 1,651.24	\$ 1,657.44	-9.0%	(\$ 13.58)	Demand	\$ 1,774.79	(\$ 3.80)	(\$ 45.63)	
SC0040	\$ 1,903.25	\$ 2,119.31	\$ 1,784.93	\$ 2,032.81	\$ 1,744.69	\$ 1,744.69	-8.3%	(\$ 13.22)	TOU+Demand	\$ 1,658.84	(\$ 3.70)	(\$ 44.40)	
SC0001	\$ 1,396.59	\$ 1,565.59	\$ 1,262.67	\$ 1,850.07	\$ 1,239.45	\$ 1,239.45	-11.3%	(\$ 13.09)	TOU+Demand	\$ 1,352.59	(\$ 3.67)	(\$ 44.00)	
SC0024	\$ 1,864.02	\$ 2,072.99	\$ 1,721.36	\$ 2,127.83	\$ 1,766.81	\$ 1,721.36	-7.7%	(\$ 11.89)	Demand	\$ 1,824.08	(\$ 3.33)	(\$ 39.95)	
SC0033	\$ 1,443.17	\$ 1,615.17	\$ 1,302.33	\$ 1,498.29	\$ 1,326.34	\$ 1,302.33	-9.8%	(\$ 11.74)	Demand	\$ 1,403.73	(\$ 3.29)	(\$ 39.44)	
SC0026	\$ 1,577.81	\$ 1,768.94	\$ 1,442.36	\$ 1,656.18	\$ 1,473.66	\$ 1,442.36	-8.6%	(\$ 11.26)	Demand	\$ 1,539.67	(\$ 3.15)	(\$ 37.84)	
SD0008	\$ 2,000.53	\$ 2,217.88	\$ 1,893.92	\$ 2,257.83	\$ 1,917.25	\$ 1,893.92	-5.3%	(\$ 8.88)	Demand	\$ 1,970.68	(\$ 2.49)	(\$ 29.95)	
SC0023	\$ 1,879.12	\$ 2,059.79	\$ 1,790.96	\$ 2,179.40	\$ 1,810.92	\$ 1,780.98	-5.2%	(\$ 8.18)	Demand	\$ 1,851.64	(\$ 2.29)	(\$ 27.49)	
SC0021	\$ 1,937.20	\$ 2,149.00	\$ 1,860.88	\$ 2,245.19	\$ 1,903.53	\$ 1,860.88	-3.9%	(\$ 6.36)	Demand	\$ 1,915.83	(\$ 1.78)	(\$ 21.37)	
SC0030	\$ 1,710.16	\$ 1,907.33	\$ 1,561.87	\$ 1,635.14	\$ 1,715.80	\$ 1,661.87	-2.8%	(\$ 4.02)	Demand	\$ 1,696.64	(\$ 1.13)	(\$ 13.52)	
SC0012	\$ 770.40	\$ 885.62	\$ 749.07	\$ 1,033.35	\$ 722.95	\$ 722.95	-6.2%	(\$ 3.95)	TOU+Demand	\$ 757.11	(\$ 1.11)	(\$ 13.29)	
SC0034	\$ 1,670.97	\$ 1,878.25	\$ 1,665.25	\$ 1,864.06	\$ 1,634.17	\$ 1,634.17	-2.2%	(\$ 3.07)	TOU+Demand	\$ 1,660.66	(\$ 0.86)	(\$ 10.31)	
SC0003	\$ 1,128.34	\$ 1,293.00	\$ 1,134.52	\$ 1,091.82	\$ 1,131.22	\$ 1,091.82	-3.2%	(\$ 3.04)	TOU	\$ 1,118.11	(\$ 0.85)	(\$ 10.22)	
SD0002	\$ 1,112.20	\$ 1,246.56	\$ 1,333.17	\$ 1,077.87	\$ 1,324.84	\$ 1,077.87	-3.1%	(\$ 2.86)	TOU	\$ 1,102.59	(\$ 0.80)	(\$ 9.61)	
SC0020	\$ 1,662.60	\$ 1,897.59	\$ 2,130.68	\$ 2,031.15	\$ 2,066.64	\$ 1,662.60	0.0%	-	Space Heating	\$ 1,662.60	\$ -	\$ -	
SC0004	\$ 1,288.65	\$ 1,421.03	\$ 1,440.20	\$ 1,388.84	\$ 1,416.18	\$ 1,288.65	0.0%	-	Space Heating	\$ 1,288.65	\$ -	\$ -	
SC0019	\$ 1,535.52	\$ 1,730.59	\$ 1,617.24	\$ 1,789.61	\$ 1,584.26	\$ 1,535.52	0.0%	-	Space Heating	\$ 1,535.52	(\$ 0.00)	(\$ 0.00)	
SC0007	\$ 1,229.77	\$ 1,381.58	\$ 1,408.84	\$ 1,238.99	\$ 1,338.17	\$ 1,229.77	0.0%	-	Space Heating	\$ 1,229.77	\$ -	\$ -	
SD0001	\$ 1,111.48	\$ 1,241.64	\$ 1,251.88	\$ 1,120.47	\$ 1,260.99	\$ 1,111.48	0.0%	-	Space Heating	\$ 1,111.48	\$ -	\$ -	
SC0002	\$ 1,422.71	\$ 1,597.54	\$ 1,621.66	\$ 1,615.04	\$ 1,603.91	\$ 1,422.71	0.0%	-	Space Heating	\$ 1,422.71	\$ -	\$ -	
SD0005	\$ 1,609.77	\$ 1,822.69	\$ 1,825.78	\$ 2,086.78	\$ 1,808.13	\$ 1,609.77	0.0%	-	Space Heating	\$ 1,609.77	\$ -	\$ -	
SC0005	\$ 1,430.22	\$ 1,599.45	\$ 1,780.42	\$ 1,549.18	\$ 1,786.01	\$ 1,430.22	0.0%	-	Space Heating	\$ 1,430.22	\$ -	\$ -	
SC0009	\$ 1,675.39	\$ 1,874.20	\$ 2,056.31	\$ 1,828.92	\$ 2,041.56	\$ 1,675.39	0.0%	-	Space Heating	\$ 1,675.39	\$ -	\$ -	
SC0011	\$ 1,539.84	\$ 1,728.17	\$ 1,872.04	\$ 1,780.49	\$ 1,874.08	\$ 1,539.84	0.0%	-	Space Heating	\$ 1,539.84	\$ -	\$ -	
SC0008	\$ 1,745.22	\$ 1,956.49	\$ 1,804.08	\$ 1,681.16	\$ 1,775.92	\$ 1,745.22	0.0%	-	Space Heating	\$ 1,745.22	\$ -	\$ -	
SC0018	\$ 1,336.84	\$ 1,512.03	\$ 1,684.39	\$ 1,554.71	\$ 1,659.63	\$ 1,336.84	0.0%	-	Space Heating	\$ 1,336.84	\$ -	\$ -	
SD0007	\$ 1,426.74	\$ 1,612.79	\$ 1,812.78	\$ 1,689.65	\$ 1,789.71	\$ 1,426.74	0.0%	-	Space Heating	\$ 1,426.74	\$ -	\$ -	
SD0003	\$ 1,637.71	\$ 1,828.94	\$ 1,731.37	\$ 1,835.61	\$ 1,746.45	\$ 1,637.71	0.0%	-	Space Heating	\$ 1,637.71	(\$ 0.00)	(\$ 0.00)	
SC0037	\$ 1,500.95	\$ 1,676.13	\$ 1,723.78	\$ 1,640.79	\$ 1,749.42	\$ 1,500.95	0.0%	-	Space Heating	\$ 1,500.95	\$ -	\$ -	
SC0016	\$ 1,774.67	\$ 1,996.45	\$ 2,042.13	\$ 2,127.88	\$ 2,055.08	\$ 1,774.67	0.0%	-	Space Heating	\$ 1,774.67	\$ -	\$ -	
SC0039	\$ 1,792.72	\$ 2,009.81	\$ 2,079.02	\$ 2,055.73	\$ 2,066.80	\$ 1,792.72	0.0%	-	Space Heating	\$ 1,792.72	\$ -	\$ -	
SC0038	\$ 2,140.42	\$ 2,392.09	\$ 2,318.36	\$ 2,680.60	\$ 2,344.21	\$ 2,140.42	0.0%	-	Space Heating	\$ 2,140.42	\$ -	\$ -	
SC0029	\$ 1,905.09	\$ 2,123.45	\$ 2,046.15	\$ 2,268.83	\$ 2,099.40	\$ 1,905.09	0.0%	-	Space Heating	\$ 1,905.09	\$ -	\$ -	
SC0031	\$ 1,849.39	\$ 2,057.35	\$ 2,073.60	\$ 2,096.00	\$ 2,065.55	\$ 1,849.39	0.0%	-	Space Heating	\$ 1,849.39	\$ -	\$ -	
SC0025	\$ 1,933.63	\$ 2,143.87	\$ 1,971.01	\$ 2,288.24	\$ 2,018.44	\$ 1,933.63	0.0%	-	Space Heating	\$ 1,933.63	\$ -	\$ -	
SD0004	\$ 1,670.13	\$ 1,882.41	\$ 1,855.25	\$ 2,124.48	\$ 1,878.23	\$ 1,670.13	0.0%	-	Space Heating	\$ 1,670.13	\$ -	\$ -	
SC0041	\$ 1,973.46	\$ 2,198.34	\$ 2,225.86	\$ 2,248.84	\$ 2,225.15	\$ 1,973.46	0.0%	-	Space Heating	\$ 1,973.46	\$ -	\$ -	
SH Profiles	\$ 64,527.6	\$ 72,223.9	\$ 67,911.6	\$ 72,983.4	\$ 67,955.4	\$ 62,250.9				\$ 63,890.14	(\$ 53.12)	(\$ 637.47)	
% Change		11.9%	5.2%	13.1%	5.3%	-3.5%				-1.0%			

It is also possible that customers only switch to a new rate plan if it provides a minimum amount of monthly bill savings. For example, customers may not be willing to switch to a new rate unless it saves them \$5 per month. Several scenarios are provided for each utility jurisdiction in the following tables along with the “perfect choice” scenario and 28 percent penetration scenario which are defined as follows.

1. **Perfect choice scenario** – This is the \$0.00 savings threshold scenario. This assumes all customers that would save from an optional rate would switch to the optimal rate and the average bill reduction of all customers would be \$8.99 per month and the total revenue loss would be 8.8 percent.
2. **Saving thresholds scenarios** – These scenarios determine the average bill reduction and total revenue loss assuming customers would switch to an optional rate for at least a specific threshold of savings. In the \$2.50 threshold scenario, 67 percent of all GMO GU customers would switch to an optional rate and the average savings would be \$8.68 per month with a total revenue loss of 8.5 percent.
3. **28 percent penetration rate scenario** - This scenario represents the estimated average bill reduction and percent revenue change assuming 28 percent of all customers switched to the optimal rate. In this scenario, the average bill reduction of all GMO GU customers would be \$2.52 per month with a total revenue loss of 2.46 percent.

**Table 5-5: GMO Monthly Bill Change from Potential Rate Switching**

	[1] Perfect Choice	[2] Savings Threshold	[2] Savings Threshold	[2] Savings Threshold	[3] 28% Penetration
<u>General Use</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$8.99)	(\$8.68)	(\$1.27)	(\$1.27)	(\$2.52)
Revenue Change %	-8.80%	-8.50%	-1.25%	-1.25%	-2.46%
Customers Switched %	91.2%	67.6%	2.9%	2.9%	28.0%
	[1] Perfect Choice	[2] Savings Threshold	[2] Savings Threshold	[2] Savings Threshold	[3] 28% Penetration
<u>Electric Space Heating</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$1.36)	(\$1.07)	(\$0.43)	(\$0.43)	(\$1.33)
Revenue Change %	-1.01%	-0.80%	-0.32%	-0.32%	-0.99%
Customers Switched %	59.4%	28.1%	6.3%	6.3%	28.0%

**Table 5-6: KCP&L-MO Monthly Bill Change from Potential Rate Switching**

	[1] Perfect Choice	[2] Savings Threshold	[2] Savings Threshold	[2] Savings Threshold	[3] 28% Penetration
<u>General Use</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$8.69)	(\$8.44)	(\$8.04)	(\$7.87)	(\$2.43)
Revenue Change %	-7.95%	-7.71%	-7.35%	-7.20%	-2.23%
Customers Switched %	77.4%	58.1%	48.4%	45.2%	28.0%
	[1] Perfect Choice	[2] Savings Threshold	[2] Savings Threshold	[2] Savings Threshold	[3] 28% Penetration
<u>Electric Heating</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$1.87)	(\$1.63)	(\$1.41)	(\$0.69)	(\$1.87)
Revenue Change %	-1.52%	-1.33%	-1.15%	-0.56%	-1.52%
Customers Switched %	41.2%	23.5%	17.6%	5.9%	28.0%



**Table 5-7: KCP&L-KS Monthly Bill Change from Potential Rate Switching**

	[1]	[2]	[2]	[2]	[3]
	Perfect Choice	Savings Threshold	Savings Threshold	Savings Threshold	28% Penetration
<u>General Use</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$4.61)	(\$4.36)	(\$0.58)	(\$0.58)	(\$1.29)
Revenue Change %	-4.2%	-3.9%	-0.5%	-0.5%	-1.2%
Customers Switched %	76.9%	57.7%	3.8%	3.8%	28.0%
	[1]	[2]	[2]	[2]	[3]
	Perfect Choice	Savings Threshold	Savings Threshold	Savings Threshold	28% Penetration
<u>Electric Heating</u>					
Savings Threshold \$/month	\$0.00	\$2.50	\$5.00	\$7.50	N/A
Avg Bill Reduction \$/month	(\$2.62)	(\$2.42)	(\$2.06)	(\$1.56)	(\$0.87)
Revenue Change %	-2.2%	-2.0%	-1.7%	-1.3%	-0.7%
Customers Switched %	40.0%	28.0%	20.0%	12.0%	28.0%

## 5.5 Demand Reduction and Revenue Attrition Analysis

If the optional rates are offered, there is a risk of revenue attrition due to demand reduction and load shifting. Demand reduction will occur when customers change their usage behaviors in response to changes in the price of energy or demand throughout the day. The larger the energy or demand price differential between on and off-peak periods the higher the expected level of response from a rate.

For this analysis, it was assumed that rates developed would generate a peak load reduction of 10 percent in both the summer and winter months similar to the rate structure types included in the 2016 KCP&L DSM Potential Study. A 10 percent usage shift from on to off-peak periods is reasonable based elasticity of substitution factors achieved in the KCP&L Smart Grid TOU pricing pilot<sup>40</sup> and rate designs being considered. Customer load response estimates were prepared to validate estimates were within reason. However, actual response will almost certainly vary and will need to be tracked and analyzed once implemented to understand actual shift.

The estimated demand reduction resulting from the implementation of new optional rates along with the estimated loss is presented below for each utility. The scenarios assume that customers' demand response revenue reduction is incremental to self-selection and that only customers who switch to a time variant rate would respond. The revenue change and demand reduction for the "perfect choice" case and 28 percent penetration case are presented below with and without demand response. If customers both switch

<sup>40</sup> KCP&L Green Impact Zone SmartGrid Demonstration Project Final Technical Report, version 2.0, dated May 22, 2015. Available at: [https://www.smartgrid.gov/files/OE0000221\\_KCPL\\_FinalRep\\_2015\\_04.pdf](https://www.smartgrid.gov/files/OE0000221_KCPL_FinalRep_2015_04.pdf)

# Verification of Response

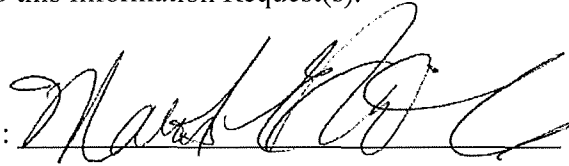
## Kansas City Power & Light Company

Docket No. 18-KCPE-480-RTS

The response to KCC Data Request#241 submitted by KCP&L, is covered by this Verification of Response:

I have read the foregoing Information Request(s) and answer(s) thereto and find answer(s) to be true, accurate, full and complete, and contain no material misrepresentations or omissions to the best of my knowledge and belief; and I will disclose to the Commission Staff any matter subsequently discovered which affects the accuracy or completeness of the answer(s) to this Information Request(s).

Signed: \_\_\_\_\_



Title: Manager, Regulatory Affairs

Date: July 9, 2018

KCPL KS  
Case Name: 2018 Kansas Rate Case  
Case Number: 18-KCPE-480-RTS

Response to Prince Darren Interrogatories - KCC\_20180724  
Date of Response: 08/01/2018

Question:296

RE: Residential Home Energy Report

Please provide the following:

1. An example of the report provided through the Residential Home Energy Report Pilot Program.
2. Residential Home Energy Report Pilot Program third party implementer.
3. A comparison of educational resources provided on KCP&L's website currently compared to the educational resources provided by the Residential Home Energy Report Pilot Program.

Number of Attachments:

Response:

1. Please see attachment Q296\_Sample KCPL HERs for sample paper Home Energy Reports used in the Company's Missouri territories. Customers have the option to also receive emailed Home Energy Reports. Some of the copy and disclaimers on the reports would need to be updated to reflect offerings available to KCP&L KS customers but the content would be similar.
2. The Company currently partners with Oracle/Opower to deliver its Home Energy Report program in our Missouri territories. Across all of our territories, including KCP&L KS, we partner with Oracle/Opower to offer residential and small-medium business customers an Online Energy Management Tool (Energy Analyzer) within their My Account portal(s). There are several competitors in this space that we may explore opportunities with in the future based to maximize cost efficiencies and customer experience benefits.
3. Within KCP&L's My Account portal, residential and small-medium business account holders have access to an online energy management tool, which is provided by Oracle/Opower, and is branded as the "Energy Analyzer". The Energy Analyzer tool provides customers with 6 pages of content to interact with, including: (1) an energy dashboard/Compare to Neighbor page; (2) an Online Home Energy Audit tool/What Uses Most; (3) a deeper exploration of the customer's energy use and neighbor comparison page/Energy Trends; (4) an energy efficiency tips library featuring several hundred energy savings tips/Ways to Save; (5) a page to create an energy-saving plan leveraging the Ways to Save page/My Plan; and a My Settings page to update general information about their

home; these inputs feed into various pages within the tool to surface more personalized and accurate information. The information available through the Energy Analyzer tool is similar to what is presented to customers via Home Energy Reports. The Energy Analyzer tool has deeper interactive engagement options like What Uses Most and Energy Trends, but most of the information presented on Home Energy Reports can also be found on the online portal.

Content on the Home Energy Reports often direct customers to the Energy Analyzer tool for deeper engagement. Evaluation, measurement and verification studies have supported that the Home Energy Reports save customers on average 1-2% on energy costs per year. They are a proactive push to customers with a point of comparison (neighbor/similar home comparison) that drives behavioral changes that results in energy savings.

The online portal is essential for customers to have access to interact and engage with on a deeper level to deepen their education and understanding, and also drives energy savings additionally. In tandem both products work together to reach and provide energy education and energy-saving opportunities to the large majority of our residential (HER, Energy Analyzer) and small-medium business customers (Energy Analyzer).

Response provided by: Elena Hill

**Attachment:**

Q296\_Sample KCPL HERs.pdf

Q296\_Verification.pdf



P.O. Box 418679, Kansas City, MO 64141

\*\*\*\*\*SINGLP T1

ALEXANDER & DANIEL RILEY  
2311 WILSON BLVD SUITE 800  
ARLINGTON VA 22201-5417



## Home Energy Report

May 25, 2018

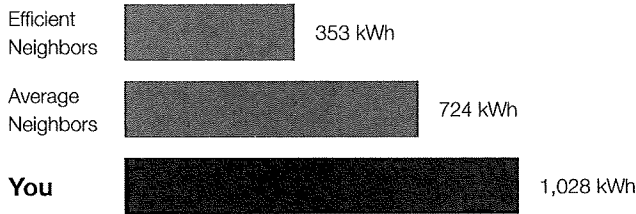
Account number [REDACTED]

We've put together this report to help you learn how to use less energy and save money on your monthly electric bill.

Find a list of rebates and energy-saving products and services you can buy.

▶ [kcpl.com/moreways](http://kcpl.com/moreways)

## Here's how you compare to neighbors



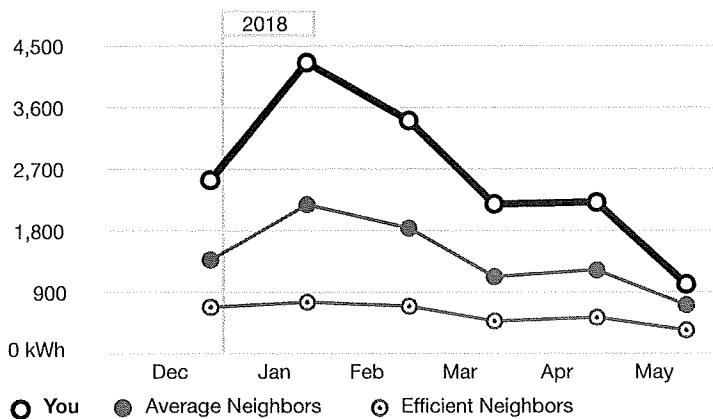
Apr 28, 2018 - May 25, 2018

This is based on 50 similar homes within approx. 4 mi. Efficient neighbors are the 20% who use the least amount of electricity. See back for details.

**!** You're using more than your neighbors.

**42%** more electricity than average neighbors

## Neighbor comparison over time



In the last 6 months, you used more than your neighbors.

**\$617** extra cost

## Tips from efficient neighbors



**Close your shades in the summer**  
Save up to \$10 per year

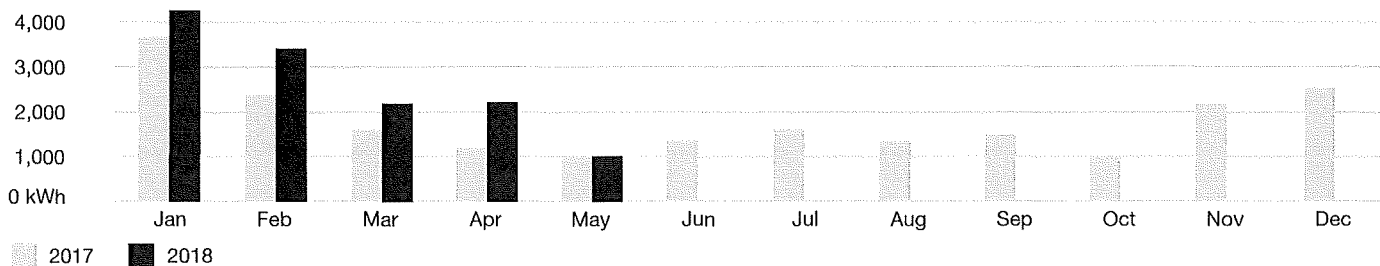


**Use fans instead of AC**  
Save up to \$15 per year

Turn over →

## Track your progress

So far this year, you've used 33% more than last year.



## Save on your next bill



### Upgrade to ENERGY STAR® appliances

The U.S. Department of Energy tests the efficiency of household appliances and electronics. The best earn the ENERGY STAR label. This program saves American households millions of dollars every year.

The ENERGY STAR label can be found on efficient models of many products. Certified models often run more quietly, last longer, and are more convenient to use than conventional models.

Visit [www.energystar.gov](http://www.energystar.gov) for details.

Save up to \$95 per year—varies by item

## Frequently asked questions

### What's a kWh?

A kilowatt hour (kWh) is a way to measure electricity use. A 100-watt lightbulb uses 1 kWh every 10 hours.

### Why does KCP&L send these reports?

When customers save energy, we get closer to meeting our energy efficiency goals. It's good for everyone.

### How is my "neighbor comparison over time" calculated?

The dollar amount is an estimate that is calculated based on a utility-wide rate price. Based on this value, we can estimate how much extra money you are saving or spending over six months.

### How can I make sure my report is accurate?

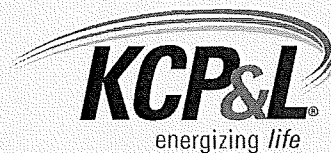
Visit [kcpl.com/myhome](http://kcpl.com/myhome) and complete the What Uses Most survey within the Energy Analyzer tab to provide us the most up-to-date information about your home.

## How can I update how I receive my report?

- ▶ [kcpl.com/reports](http://kcpl.com/reports)
- ▶ [HomeEnergyReport@kcpl.com](mailto:HomeEnergyReport@kcpl.com)
- ▶ (855) 444-7591

## Find more energy saving purchases

- ▶ [kcpl.com/moreways](http://kcpl.com/moreways)



Participants in the KCP&L Energy Report program consist of a random sampling of residential customers who live within the KCP&L Missouri and KCP&L GMO territory. Annual cost savings (if stated) may vary. You can opt out of this program at any time.

♻️ Printed on 10% post-consumer recycled paper using water-based inks.

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P.O. Box 418679, Kansas City, MO 64141

\*\*\*\*\*SNGLP T1

ALEXANDER & DANIEL RILEY  
2311 WILSON BLVD SUITE 800  
ARLINGTON VA 22201-5417



## Home Energy Report

May 25, 2018

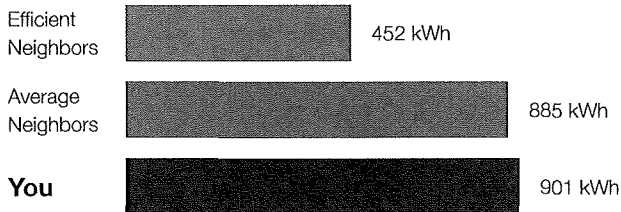
Account number [REDACTED]

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## Here's how you compare to neighbors



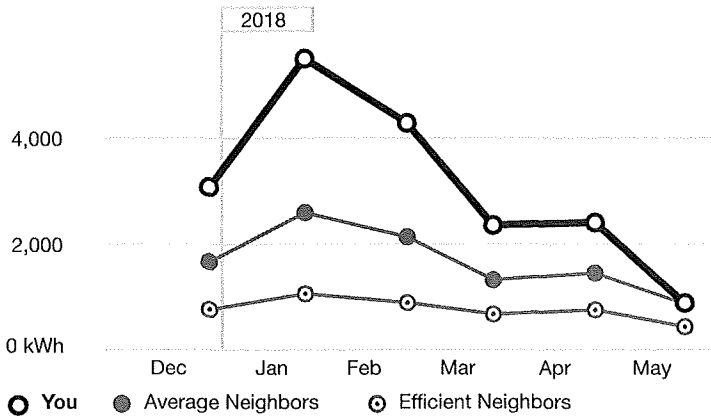
Apr 28, 2018 - May 25, 2018

This is based on 40 similar homes within approx. 9 mi. Efficient neighbors are the 20% who use the least amount of electricity. See back for details.

**!** You're using more than your neighbors.

**2%** more electricity than average neighbors

## Neighbor comparison over time



In the last 6 months, you used more than your neighbors.

**\$536** extra cost

## Tips from efficient neighbors



**Set your thermostat to 78°F in the summer**  
Save up to \$135 per year

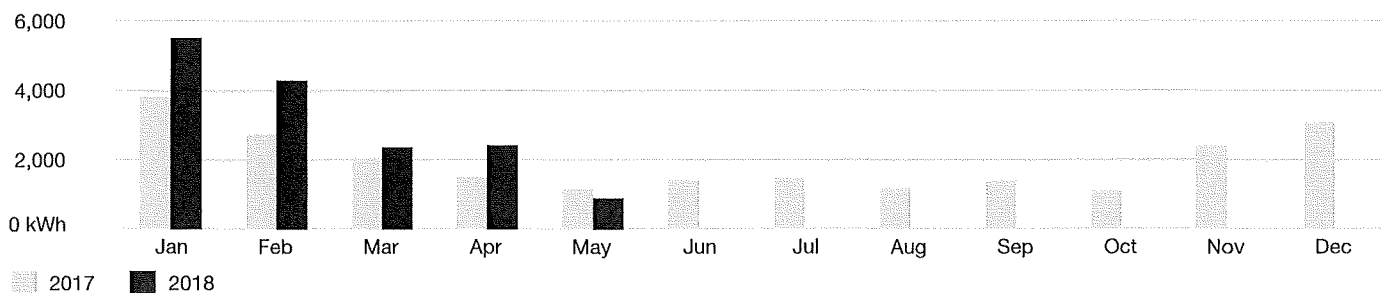


**Install window shades such as blinds or shutters**  
Save up to \$15 per year

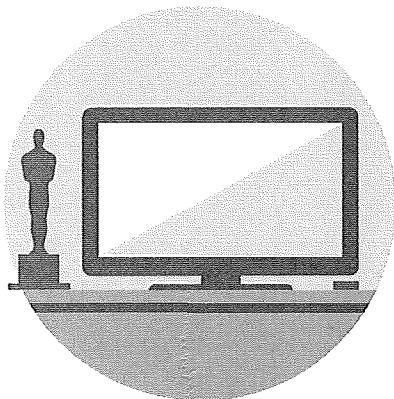
Turn over →

## Track your progress

So far this year, you've used 37% more than last year.



## Save on your next bill



### Choose an efficient television

Some large flat-screen televisions use more energy than a refrigerator.

When shopping for a new television, look for the ENERGY STAR® label. Certified TVs are, on average, 27% more energy efficient than similar non-labeled models—without sacrificing picture quality. An LCD TV with an LED backlight is usually the most efficient option.

Before moving your old TV to another room, consider its energy costs—recycling it may be a better option.

Save up to \$40 per year

## Frequently asked questions

### What's a kWh?

A kilowatt hour (kWh) is a way to measure electricity use. A 100-watt lightbulb uses 1 kWh every 10 hours.

### Why does KCP&L send these reports?

When customers save energy, we get closer to meeting our energy efficiency goals. It's good for everyone.

### How is my "neighbor comparison over time" calculated?

The dollar amount is an estimate that is calculated based on a utility-wide rate price. Based on this value, we can estimate how much extra money you are saving or spending over six months.

### How can I make sure my report is accurate?

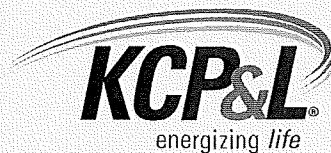
Visit [kcpl.com/myhome](http://kcpl.com/myhome) and complete the What Uses Most survey within the Energy Analyzer tab to provide us the most up-to-date information about your home.

## How can I update how I receive my report?

- ▶ [kcpl.com/reports](http://kcpl.com/reports)
- ▶ [HomeEnergyReport@kcpl.com](mailto:HomeEnergyReport@kcpl.com)
- ▶ (855) 444-7591

## Find more energy saving purchases

- ▶ [kcpl.com/moreways](http://kcpl.com/moreways)



Participants in the KCP&L Energy Report program consist of a random sampling of residential customers who live within the KCP&L Missouri and KCP&L GMO territory. Annual cost savings (if stated) may vary. You can opt out of this program at any time.

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P.O. Box 418679, Kansas City, MO 64141

\*\*\*\*\*SINGLP T1

ALEXANDER & DANIEL RILEY  
2311 WILSON BLVD SUITE 800  
ARLINGTON VA 22201-5417



## Home Energy Report

May 25, 2018

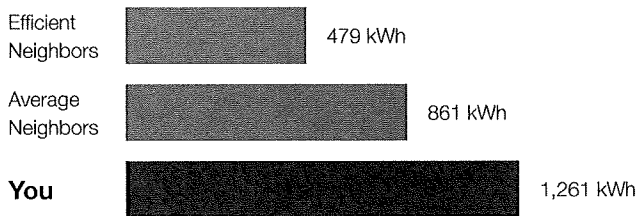
Account number [REDACTED]

We've put together this report to help you learn how to use less energy and save money on your monthly electric bill.

Find a list of rebates and energy-saving products and services you can buy.

▶ [kcpl.com/moreways](http://kcpl.com/moreways)

## Here's how you compare to neighbors



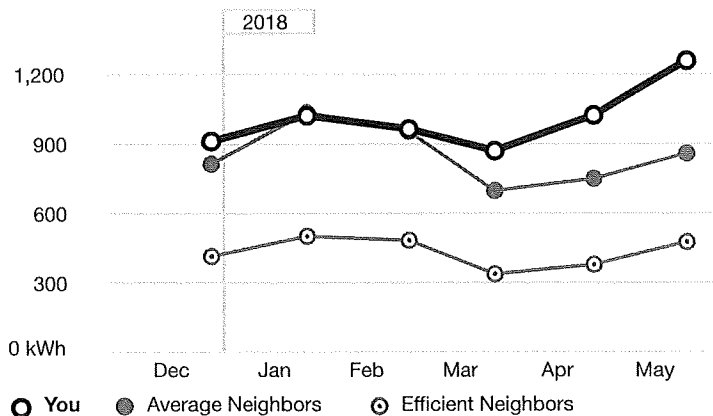
Apr 27, 2018 - May 25, 2018

This is based on 60 similar homes within approx. 1 mi. Efficient neighbors are the 20% who use the least amount of electricity. See back for details.

**!** You're using more than your neighbors.

**46%** more electricity than average neighbors

## Neighbor comparison over time



In the last 6 months, you used more than your neighbors.

**\$93** extra cost

## Tips from efficient neighbors



**Close your shades in the summer**  
Save up to \$10 per year

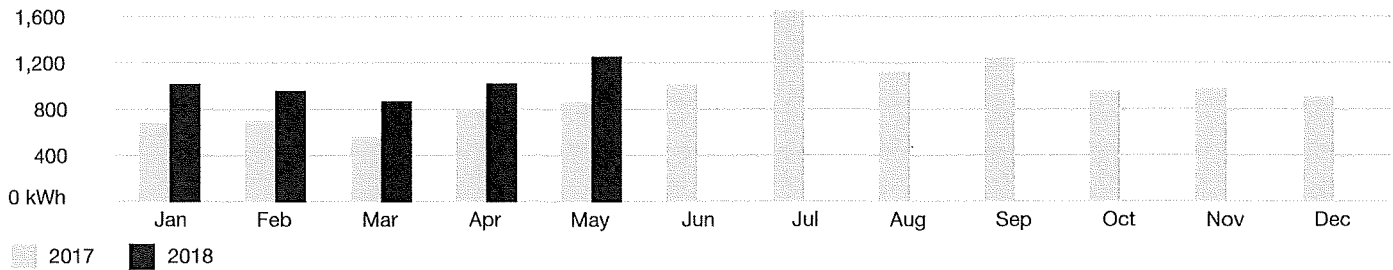


**Use fans instead of AC**  
Save up to \$15 per year

Turn over →

## Track your progress

So far this year, you've used 42% more than last year.



## Save on your next bill



### Upgrade to ENERGY STAR® appliances

The U.S. Department of Energy tests the efficiency of household appliances and electronics. The best earn the ENERGY STAR label. This program saves American households millions of dollars every year.

The ENERGY STAR label can be found on efficient models of many products. Certified models often run more quietly, last longer, and are more convenient to use than conventional models.

Visit [www.energystar.gov](http://www.energystar.gov) for details.

Save up to \$95 per year—varies by item

## Frequently asked questions

### What's a kWh?

A kilowatt hour (kWh) is a way to measure electricity use. A 100-watt lightbulb uses 1 kWh every 10 hours.

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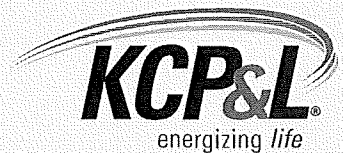
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## Verification of Response

### Kansas City Power & Light Company

Docket No. 18-KCPE-480-RTS

The response to KCC 20180716 Data Request # 296 submitted by KCP&L, is covered by this Verification of Response:

I have read the foregoing Information Request(s) and answer(s) thereto and find answer(s) to be true, accurate, full and complete, and contain no material misrepresentations or omissions to the best of my knowledge and belief; and I will disclose to the Commission Staff any matter subsequently discovered which affects the accuracy or completeness of the answer(s) to this Information Request(s).

Signed: Kimberly H. Wanser

Title: Director, Energy Solutions

Date: July 26, 2018

## CERTIFICATE OF SERVICE

18-KCPE-480-RTS

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing document was served by electronic service on this 12<sup>th</sup> day of September, 2018, to the following:

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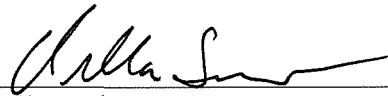
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Administrative Specialist