

# EXHIBIT

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Exhibit No.:  
Issue(s):

Clean Charge Network/  
Community Solar/  
Low Income Community Solar/  
Green Tariff/  
PAY AS YOU SAVE®/  
Low Income Weatherization/  
Economic Relief Pilot Program/  
Economic Development Rider/  
Customer Information System  
and Customer Care and Billing

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Case No.:

Marke/Rebuttal  
Public Counsel  
ER-2018-0145  
and ER-2018-0146

## REBUTTAL TESTIMONY

OF

**GEOFF MARKE**

FILED  
October 23, 2018  
Data Center  
Missouri Public  
Service Commission

Submitted on Behalf of  
the Office of the Public Counsel

**KANSAS CITY POWER & LIGHT COMPANY**  
and  
**KCP&L GREATER MISSOURI OPERATIONS COMPANY**

**Case No. ER-2018-0145 and ER-2018-0146**

July 27, 2018

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service )  
 ) File No. ER-2018-0145  
 )  
 )


In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service )  
 ) File No. ER-2018-0146  
 )  
 )

**AFFIDAVIT OF GEOFF MARKE**

STATE OF MISSOURI )  
 ) ss  
COUNTY OF COLE )

Geoff Marke, of lawful age and being first duly sworn, deposes and states:


1. My name is Geoff Marke. I am a Regulatory Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
Geoff Marke  
Chief Economist

Subscribed and sworn to me this 27<sup>th</sup> day of July 2018.



JERENE A. BUCKMAN  
My Commission Expires  
August 23, 2021  
Cole County  
Commission #13754037

  
\_\_\_\_\_  
Jerene A. Buckman  
Notary Public

My commission expires August 23, 2021.

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**REBUTTAL TESTIMONY**

**OF**

**GEOFF MARKE**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. ER-2018-0145 & ER-2018-0146**

1 **I. INTRODUCTION**

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

3 A. Geoffrey Marke, PhD, Chief Economist, Office of the Public Counsel ("OPC"), P.O. Box  
4 2230, Jefferson City, Missouri 65102.

5 **Q. Are you the same Geoff Marke who filed direct testimony in Case Nos. ER-2018-0145  
6 and ER-2018-0146?**

7 A. I am.

8 **Q. What is the purpose of your rebuttal testimony?**

9 A. I respond to the direct testimony of other parties regarding:

- 10 • Clean Charge Network ("CCN")
  - 11 ▪ Kansas City Power & Light Company and KCPL Greater Missouri Operations
  - 12 Company ("KCPL/GMO" or "Company") witness Charles A. Caisley
- 13 • Community Solar
  - 14 ▪ KCPL/GMO witness Bradley D. Lutz
- 15 • Low Income Community Solar
  - 16 ▪ Renew Missouri Advocates witness Philip Fracica
- 17 • Green Tariff
  - 18 ▪ KCPL/GMO witness Bradley D. Lutz
- 19 • Pay As You Save® ("PAYS®")
  - 20 ▪ Renew Missouri Advocates witness Philip Fracica
- 21 • Low Income Weatherization ("LIWAP")
  - 22 ▪ Missouri Division of Energy ("DE") witness Sharlet E. Kroll
  - 23 ▪ Missouri Public Service Commission Staff ("Staff") witness Kory Boustead

- 1           • Economic Relief Pilot Program (“ERPP”)
- 2                 ▪ Staff witness Contessa King
- 3           • Economic Development Rider (“EDP”)
- 4                 ▪ Staff witness Sarah L.K. Lange
- 5           • Customer Information System (“CIS”) and Customer Care and Billing (“CCB”)
- 6                 ▪ KCPL/GMO witnesses Charles A. Caisley and Forrest Archibald

7   **II. CLEAN CHARGE NETWORK**

8   **Q. Please summarize KCPL/GMO’s request.**

9   A. KCPL and GMO witness Mr. Caisley is requesting that the Commission “reconsider” its  
10 position on the unrecoverable capital and O&M costs related to its Clean Charge Network  
11 (“CCN”).

12 **Q. What is OPC’s position?**

13 A. Consistent with the Commission’s ruling in ER-2016-0285, OPC recommends the continued  
14 removal of these costs as the Commission has already ruled it has no statutory authority to  
15 regulate the CCN operations.

16 Both ratepayers and drivers are best served by a competitive market for EV charging  
17 services rather than by a regulated monopoly. The best ways for KCPL and GMO’s  
18 *regulated* services to enable the promotion of EV adoption by emphasizing its essential  
19 services, primarily through offering time-of-use (“TOU”) rates on an opt-in basis that  
20 encourages charging during low-cost, off-peak hours (this specific recommendation and its  
21 benefits will be discussed at length in my rebuttal rate design testimony).

22 The Commission has already rejected KCPL and GMO’s proposal to recover EV charging  
23 station costs “above the line” and there has been no change in circumstances to warrant a  
24 different decision. The Commission should continue to leave deployment of EV charging  
25 infrastructure to non-regulated services and importantly, to existing and future free-market  
26 competition; thereby reducing the risk of future stranded utility assets and costs.

1 **Q. What do you mean by stranded assets?**

2 A. Stranded assets are assets that have suffered from unanticipated or premature write-downs,  
3 devaluations, or conversion to liabilities. There is no question EV charging is a developing  
4 technology. EV charging stations can become stranded assets when new technologies are  
5 introduced and nimble companies out-compete incumbent utilities. Regulated electric  
6 utilities are then exposed to the risk of having stranded assets on their books. Failure to  
7 account for changing technologies may result in ratepayers funding assets that are outdated  
8 and are no longer useful by or useful to customers.

9 **Q. Would KCPL and GMO's current CCN investments be considered stranded assets?**

10 A. No, not for ratepayers because of the Commission's Order in ER-2016-0285. It may be too  
11 soon to know if the Companies' 929 charging stations will prove to be a stranded investment  
12 for shareholders, however, the early returns are not encouraging.

13 According to the response to OPC DR-2032, from 2010 to 2017 there were 905,455  
14 conventional vehicles (non-electric) registered in the KCPL-KS, KCPL-MO and KCPL-GMO  
15 service territories.<sup>1</sup> During that same time span only 2,789 EVs were registered in total (or  
16 .03%), with only 972 in KCPL-MO and 434 in the GMO service territory.<sup>2</sup>

17 Furthermore, according to OPC DR-2034, there have been a total of 2,092 "unique drivers"  
18 who have used the CCN through 2017. This means that, at least, more than 700 of the registered  
19 EV drivers who reside in the three KCPL service territories have never utilized the CCN.<sup>3</sup> For  
20 perspective, there are 1,862 available charging ports on the Clean Charge Network, or roughly  
21 1 charging port for each of the 2092 unique EV drivers who have *ever* used the CCN.

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<sup>1</sup> See GM-1 which includes a selected summary from the Excel spreadsheet titled EPRI-201801-KCPL\_All.XLSX from the Company's response to OPC DR-2032.

<sup>2</sup> See GM-2 which includes sheet1 from the Excel spreadsheet titled EV in operation talbe.xlsx from the Company's response to OPC DR-2032.

<sup>3</sup> See GM-3.

1 It is also important to note that up until 2018 using the CCN charging stations was entirely  
2 free.<sup>4</sup> Moving forward, drivers will have to pay for charging service, at least at the 749 non-  
3 host paid sites. Equally important, the vast majority of these charging stations are also not “fast  
4 charging” but instead “Level 2” models that take 4-5 hours to fully charge an EV with a 100-  
5 mile battery.<sup>5</sup> The likelihood of generating enough revenues to cover the cost of the capital  
6 (and O&M) investments will be a challenge. Thankfully, and correctly, ratepayers do not have  
7 to bear those costs.

8 **Q. Do you have any final recommendations regarding the requested cost recovery associated**  
9 **with the CCN?**

10 A. Yes, according to OPC DR-2026, ratepayers are currently being charged \$250,000 per year for  
11 marketing, outreach, adoption and education.<sup>6</sup> OPC does not believe it is reasonable or prudent  
12 to charge ratepayers for marketing or other activities supporting a nonregulated service. As  
13 such, OPC recommends that the Commission disallow costs associated with EV marketing in  
14 account number 910000.

### 15 **III. COMMUNITY SOLAR**

16 **Q. Please summarize KCPL/GMO’s request.**

17 A. KCPL and GMO (and KCPL-KS in the concurrent KCC rate case) are proposing a 5 MW  
18 community solar subscriber program for all interested customers (except those on Unmetered,  
19 Lighting, Net-Metered, or Time-of-Use (“TOU”) Services).

20 **Q. What is OPC’s primary position on this proposal?**

21 A. OPC’s primary recommendation is for KCPL and GMO to withdraw their proposal and submit  
22 it in a separate docket immediately following this case, or, better yet, as part of its CCN

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<sup>4</sup> ER-2018-0145 & ER-2018-0146 Direct Testimony of Charles A. Caisley p. 5, 11-12.

<sup>5</sup> Chargepoint (2018) Level up your EV charging knowledge. <https://www.chargepoint.com/blog/level-your-ev-charging-knowledge/>

<sup>6</sup> See GM-4.

1 application (if it is ultimately built in Missouri) when KCPL/GMO have more information on  
2 the project.

3 **Q. Why has OPC taken this position?**

4 A. The volume of issues in this rate case has crowded out the necessary dialogue and discovery  
5 needed to approve a community solar project. To provide an example of one of the many issues  
6 that have complicated this proposal, Company witness Lutz has recommended that any  
7 residential customer receiving service under the Company's proposed TOU pilot rate be  
8 ineligible for the community solar program. Alternatively, Staff, has recommended that all  
9 customers be subject to a TOU rate design. If both recommendations were accepted there  
10 would be no residential customer eligible to participate in the community solar program.

11 **Q. Does OPC have any secondary recommendations or concerns it would like to bring to  
12 the Commissions attention?**

13 A. Yes, OPC recommends that any community solar program include the \$4 million solar  
14 investment required by SB 564 and included in §393.1665.2 RSMo which states:

15 An electrical corporation with less than one million but more than two-hundred  
16 thousand Missouri electric customers shall invest in the aggregate no less than **four**  
17 **million dollars in utility-owned solar facilities** located in Missouri or in an adjacent  
18 state during the period between the effective date of this section and December 31,  
19 2023. (emphasis added)

20 First, ensuring that the costs associated with the community solar project(s) include a carve-  
21 out specifically for a utility-owned solar at \$4 million for KCPL and \$4 million for GMO  
22 should help lower the overall costs of the generating facility and presumably allow the  
23 subscription terms to be more favorable for interested ratepayers.

24 Second, and consistent with OPC's recommendation that KCPL and GMO consolidate  
25 services in its next rate case, OPC recommends that only one site be selected for the Missouri-  
26 side of its operations. This recommendation differs from Staff's which recommended separate  
27 facilities and offerings for KCPL and GMO. It also differs from the Company request to select



1           one utility-scale project site that would encompass both its Missouri and Kansas operations.  
2           OPC’s recommendation provides a reasonable compromise by capturing a degree of cost  
3           savings (through economies of scale) and regulatory certainty (by excluding its Kansas  
4           affiliates).

5           Third, OPC rejects KCPL and GMO’s recommendation that any unsubscribed solar costs be  
6           flowed through their fuel adjustment clauses (“FAC”). Permitting KCPL and GMO to recover  
7           non-fuel costs through the FAC would create a perverse incentive to overbuild and be  
8           indifferent to the subscription status of participants. Furthermore, nonparticipants would no  
9           longer “be held harmless.” This is unacceptable. OPC recommends that this risk be borne by  
10          shareholders. If KCPL and GMO truly believe that the cost will be less than market prices,  
11          its shareholders will make money off the non-subscribed portion. If it is greater than market  
12          price, the shareholders absorb the extra cost. If shareholders aren’t willing to take the risk,  
13          the nonparticipating ratepayer should not either.

14          Fourth, the size of the solar unit should not exceed IMW-AC. In contrast, KCPL and GMO  
15          have proposed to size a 5 MW-AC unit. Perhaps KCPL and GMO will be able to expand to a  
16          larger size in the future; however, at this point, there are no operational community solar  
17          programs by an IOU in Missouri. Recognizing there is a legitimate risk that subscribers may  
18          not materialize or that subscribers will “fall off” the service raises the potential for unnecessary  
19          cost shifting to nonparticipants. Public Counsel recommends a measured approach. KCPL and  
20          GMO should be required to demonstrate full subscription at IMW for a minimum of three  
21          years before additional solar subscriptions are offered.

22          Finally, OPC would want KCPL and GMO to adopt recommendations similar to those agreed  
23          to by stakeholders in Ameren Missouri’s EA-2016-0207 case including more detail regarding  
24          marketing and administrative costs as well as quarterly reporting requirements and Frequently  
25          Answered Question (“FAQs”) write-up on its website including sample questions such as:

- 26           • Who is eligible?

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& ER-2018-0146

- 1 • What does it cost?
- 2 • Do I own the panel?
- 3 • How much solar can I subscribe to?
- 4 • Where will the subscription solar be located?
- 5 • How big is the subscription solar?
- 6 • Will this make my rates go up (non-subscriber)?
- 7 • Is my payment for the solar eligible for a tax deduction/credit?
- 8 • What is the minimum participation period?
- 9 • What if I want to reduce/increase my shares?
- 10 • What happens if I drop off or move?
- 11 • What happens if I pass away?
- 12 • How is my bill calculated?
- 13 • How will this appear on my bill?
- 14 • How much can I expect my bill to increase?
- 15 • Will my bill be subject to additional increases in the future?
- 16 • Is it possible the cost of my bill will decrease as a result of my participation?
- 17 • What if the cost of solar decreases over the next twenty-years? Will my cost
- 18 decrease?
- 19 • What is the fixed portion of my bill? Will it be the same every month if I participate?
- 20 • What are the surcharges on my bill? Will they be the same every month if I
- 21 participate?
- 22 • Do I own the renewable energy credit (RECs) for my portion of this solar project?
- 23 • Does participation in this program qualify me as a net metering or co-generation
- 24 customer?
- 25 • Can I still participate in this program if I am currently a net metering or co-
- 26 generation customer?

- 1 • Is the renewable energy I support through the Subscription Solar program delivered
- 2 directly to my residence?
- 3 • Is there a calculator or spreadsheet I can use to help me determine my future
- 4 expense?
- 5 • Am I eligible for the federal tax rebate known as the Investment Tax Credit?
- 6 • Who gets to claim the environmental benefits of this project?
- 7 • What if the system is sold out and I want to participate?
- 8 • How long will the community solar be in service?
- 9 • What panels, inverters, and racking systems are being used in the array?
- 10 • How do I enroll?

11 The details on all of the aforementioned points are better addressed in a separate docket  
12 following the conclusion of this rate case.

#### 13 **IV. LOW INCOME COMMUNITY SOLAR**

14 **Q. Please summarize Renew Missouri's recommendation.**

15 A. In general, Renew witness, Mr. Fracica recommends that KCPL and GMO pursue a low  
16 income community solar program. He references two different models utilized by a Missouri  
17 municipality (Columbia Water and Light) and a Colorado rural cooperative (Poudre Valley).  
18 The latter example was able to apply federal LIHEAP dollars towards its capital costs. Mr.  
19 Fracicia concludes his testimony by suggesting that existing KCPL/GMO energy assistance  
20 expenditures could provide a stream of money that could be utilized to support a low income  
21 community solar program.

22 **Q. What is OPC's position?**

23 A. Presently, OPC cannot support Renew Missouri's recommendations as they lack the necessary  
24 detail for implementation and do not appear to be fiscally prudent. To understand OPC's  
25 position, consider that LIHEAP funds fall under the purview of the Missouri Department of  
26 Social Services ("MDSS") not the Missouri Public Service Commission, KCPL, or GMO.

1 MDSS has to apply to the federal government for LIHEAP funds with a detailed plan on how  
 2 the funds will be spent and allocated. LIHEAP is not a block grant from which funds can be  
 3 redirected midstream. MDSS would need to specifically request to allocate LIHEAP funds for  
 4 solar in its application and then the plan would still need approval by the US Department of  
 5 Health and Human Services.

6 Table 1 and 2 provides a breakdown of KCPL and GMO's operating revenue, LIHEAP  
 7 assistance, and charitable dollar energy assistance by year from 2009 to 2017 as filed in the  
 8 utilities annual reports to the Commission.

9 Table 1: KCPL Annual Operating Revenue, LIHEAP and Charitable Dollars for Energy  
 10 Assistance 2009 – 2017 per Annual Reports filed with the Commission

Year	Operating Revenue	LIHEAP	Charitable Dollars	LIHEAP + Charity
2009	\$590,116,227	\$1,374,256	\$3,662,847	\$5,037,103
2010	\$683,677,205	\$1,136,158	\$4,467,708	\$5,603,866
2011	\$707,338,468	\$1,742,431	\$3,467,325	\$5,209,756
2012	\$712,042,842	\$1,893,909	\$4,368,128	\$6,262,037
2013	\$758,243,587	\$1,272,042	\$2,382,881	\$3,654,923
2014	\$769,402,230	\$2,179,383	\$1,925,395	\$4,104,778
2015	\$809,815,149	\$3,158,287	\$899,607	\$4,057,894
2016	\$911,550,848	\$505,244	\$3,080,633	\$3,585,877
2017	\$934,997,557	\$463,478	\$3,173,943	\$3,637,421
% change 2009 to 2017	+ 58%	- 66%	- 13%	- 28%

1 Table 2: GMO Annual Operating Revenue, LIHEAP and Charitable Dollars for Energy  
 2 Assistance 2009 – 2017 per Annual Reports filed with the Commission

Year	Operating Revenue	LIHEAP	Charitable Dollars	LIHEAP + Charity
2009	\$637,768,024	\$1,736,814	\$2,577,947	\$4,314,761
2010	\$715,488,233	\$1,239,696	\$3,242,856	\$4,482,552
2011	\$740,866,123	\$1,420,479	\$2,298,891	\$3,719,370
2012	\$744,995,457	\$1,312,246	\$2,332,685	\$3,644,931
2013	\$784,658,425	\$1,099,824	\$1,910,326	\$3,010,150
2014	\$824,287,143	\$1,312,246	\$2,799,129	\$4,111,375
2015	\$762,669,983	\$3,312,360	\$786,532	\$4,098,892
2016	\$774,373,864	\$718,391	\$2,306,010	\$3,024,401
2017	\$791,456,537	\$722,375	\$2,432,296	\$3,154,671
% change 2009 to 2017	+ 24%	- 58%	- 6%	- 27%

3 **Q. What should the Commission note from the tables above?**

4 A. First, that LIHEAP dollars allocated to both KCPL and GMO have decreased 66% and 58%  
 5 respectively from 2009 to 2017. Second, that funding for both LIHEAP and charitable dollars  
 6 (ratepayer and shareholder) fluctuates considerably in any given year. Third, the annual amount  
 7 of energy assistance funding available in a given year is relatively small. Taking some or all of  
 8 those funds and redirecting it towards a long-term solar investment would fall well short of  
 9 covering the costs to procure such an asset and no doubt negatively impact those low income  
 10 families who require such assistance. And finally, operating revenue from tariffed services has  
 11 increased considerably over this same period which has resulted in increased electric bills for  
 12 ratepayers and a greater energy burden on those least able to bear it.<sup>7</sup>

13 Putting aside the complexity inherent in designing an appropriate and equitable low income  
 14 community solar program,<sup>8</sup> OPC cannot support Renew Missouri's recommendation to

<sup>7</sup> The Commission should also be aware that, at least for 2018, the Missouri Legislature ceased funding the "Utilicare Stabilization Fund" from general revenue.

<sup>8</sup> For example, how is low income defined? Which low income customers are selected? How much of this service is subsidized? How long are the terms of the contract? Do customers need to have and maintain a certain credit score? What happens if the subscriber is no longer considered low income in later years? Etc...

1 subsidize a community solar project with dwindling and highly volatile energy assistance  
2 funding to low income households in the face of rising electricity bills for all customers.

3 **V. GREEN TARIFF**

4 **Q. What are KCPL and GMO requesting by their Green Tariff?**

5 A. KCPL, here and in Kansas before the Kansas Corporation Commission, and GMO are  
6 proposing to dedicate energy from a 100-200 MW renewable energy Power Purchase  
7 Agreement (“PPA”) to interested non-residential customers (except those on Unmetered,  
8 Lighting, Net-Metered, or Time-of-Use (“TOU”) Services) who want to promote construction  
9 of new renewable energy and attribute part of their energy consumption to that newly built  
10 renewable energy.

11 **Q. What is OPC’s position?**

12 A. OPC’s primary recommendation is for KCPL and GMO to withdraw their proposal and submit  
13 it in a separate docket immediately following this case, or after they have more information on  
14 the project. Similar to the aforementioned community solar program, the volume of issues in  
15 this rate case has crowded out the necessary dialogue and discovery needed to evaluate and  
16 make recommendations about an appropriate Green Tariff project.

17 OPC offers up for the Commission’s consideration the following recommendations. First, and  
18 consistent with OPC’s recommendation that KCPL and GMO consolidate services in a joint  
19 next rate case, OPC recommends that only one site be selected for the Missouri-side of the  
20 joint KCPL/GMO operations. This recommendation differs from Staff who recommends  
21 separate facilities and offerings for KCPL and GMO. It also differs from the request from the  
22 Company who wanted to select one utility-scale project site which would encompass KCPL-  
23 KS, KCPL-MO, and GMO operations. OPC’s recommendation provides a reasonable  
24 compromise by capturing a degree of cost savings (through economies of scale) and regulatory  
25 certainty (by excluding its Kansas operations).

1 Second, OPC rejects KCPL and GMO's recommendation that any unsubscribed green tariff  
2 costs be flowed through their fuel adjustment clauses ("FAC"). The same argument made  
3 earlier regarding the proposed community solar program applies here as well. If shareholders  
4 aren't willing to take the risk, then nonparticipating ratepayer should not either.

5 Finally, OPC requests that KCPL and GMO make commitments similar to those Ameren  
6 Missouri did in its Green Tariff, Case No. ET-2018-0063, which, among other things, included  
7 providing more detail regarding marketing and administrative costs, sharing of  
8 undersubscription risks between shareholders and ratepayers, and publishing a Frequently  
9 Answered Question ("FAQs") write-up on its website.

10 The details on all of the aforementioned points would better be addressed in a separate docket  
11 following the conclusion of this rate case.

## 12 **VI. PAY AS YOU SAVE®**

13 **Q. Please summarize Renew Missouri's recommendation.**

14 A. Mr. Fracica provides an overview of the PAYS® on-bill financing ("OBF") tariff model  
15 emphasizing that the PAYS® model is particularly appealing to low-income customers and  
16 renters and should perfectly complement the new CIS and CCB systems that KCPL/GMO has  
17 invested in. Mr. Fracica also notes that the recently completed, independent third-party, The  
18 Empire District Electric PAYS® Feasibility Study (Doc. No. ER-2016-0023) concluded that  
19 the PAYS® program would be a cost-effective option for Empire and its ratepayers. Mr. Fracica  
20 ultimately recommends that, "The Company in this case should take steps to explore an OBF  
21 feasibility study."<sup>9</sup>

22 **Q. What is OPC's position?**

23 A. OPC generally agrees with Renew on the potential ability of a PAYS® program to enable low  
24 income customers and renters to better control their electric bill. These two demographics are  
25 glaringly underrepresented in terms of KCPL/GMO MEELA participation and are unable to

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<sup>9</sup> ER-2018-0146 Direct Testimony of Philip Fracica p 15, 8-9.

1 “opt out” of having to shoulder the increasingly growing MEEIA surcharge costs unlike certain  
2 commercial and industrial customers. OPC does not object to exploring a future PAYS®  
3 program in a MEEIA application but notes that Mr. Fracia’s recommendation to the  
4 Commission is not necessary as the Commission has already ordered KCPL to conduct an  
5 analysis for its next MEEIA application. As stated in the Report and Order in Doc No. ER-  
6 2016-0213:

7 The Commission orders KCPL to consider whether to incorporate PACE and PAYS  
8 programs in its next Missouri Energy Efficiency Investment Act (“MEEIA”) filing.<sup>10</sup>

9 OPC understands that KCPL/GMO plans to file a MEEIA 3 application by the end of the  
10 summer. Presumably, KCPL will comply with the Commission’s explicit orders and the results  
11 of the PAYS® investigation will be included in the application which should make Renew  
12 Missouri’s request unnecessary.

## 13 **VII. LOW INCOME WEATHERIZATION**

14 **Q. Please summarize DE’s recommendations.**

15 A. Mrs. Kroll makes three recommendations to the Commission: 1.) to maintain LIWAP funding  
16 at the current funding level of \$573,888 for KCPL and \$500,000 for GMO with any unspent  
17 funds to be rolled forward into future program years; 2.) to convene a joint advisory group of  
18 interested stakeholders on weatherization policy; and 3.) to order the new advisory board to  
19 consider the policy of voluntary customer contribution check-off box on customer’s bills.

20 **Q. Please summarize Staff’s recommendations.**

21 A. Mrs. Boustead also recommends that the funding levels remain the same (although Staff puts  
22 forward a \$400,000 annual amount compared to DE’s \$500,000 annual amount).<sup>11</sup> Mrs.  
23 Boustead also recommends that KCPL and GMO “work closely with the applicable

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<sup>10</sup> ER-2016-0285 Report and Order p. 14.

<sup>11</sup> It is OPC’s understanding that \$400,000 is the agreed-to annual amount with a potential additional \$100,000 available if the annual budget is exceeded. However, further clarification from Staff and DE may be warranted.



1 Community Action Agencies to address any process barriers to getting the funds fully  
2 expended within the IEW program year.”<sup>12</sup>

3 **Q. What is OPC’s position?**

4 A. OPC supports maintaining the terms and the annual weatherization amounts set from the  
5 previous rate cases. Regarding the recommendations made to convene a joint advisory group  
6 (DE) or ordering the KCPL/GMO to work closely with sponsored CAA’s (Staff), OPC  
7 believes that both of these recommendations are largely already being addressed as a result of  
8 the “Merger Commitments and Conditions” listed within the Corporate Social Responsibility  
9 section of the Stipulation and Agreement entered into in Case No. EM-2018-0012 which states:

10 KCP&L and GMO commit to an annual in-person meeting with each of the local  
11 Community Action Agencies for the next five years at Holdco’s headquarters in  
12 Kansas City, Missouri, with extended invitations to (at least) the Commission Staff and  
13 OPC to discuss progress to date including Strengths, Weaknesses, Opportunities and  
14 Threats to KCP&L’s and GMO’s low-income population.<sup>13</sup>

15 In light of DE’s interest, OPC recommends that KCPL and GMO extend an invitation to DE  
16 and (or any other relevant stakeholders) who would like to participate in the annual in person  
17 meeting with the local Community Action Agencies in the Missouri KCPL and GMO service  
18 territories.

19 **VIII. ECONOMIC RELIEF PILOT PROGRAM**

20 **Q. What are Staff, KCPL and GMO requesting?**

21 A. Staff, KCPL and GMO are requesting that the ERPP design and funding amount remain the  
22 same. Staff further recommends that a third-party evaluation occur before the next rate case(s).

23 **Q. Does OPC support the proposed funding level?**

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<sup>12</sup> Staff Cost of Service Report: p. 130, 1-2.

<sup>13</sup> See also EM-2018-0012, Item No. 48, Stipulation and Agreement, Exhibit B, p. 3

1 A. OPC is encouraged that the number of participants for both KCPL and GMO has increased.  
2 The 2018 participations numbers for approximately half of 2018 have already surpassed the  
3 2017 numbers by 37% (1,495 to 1,964) for KCPL and 109% (919 to 1,920) for GMO.<sup>14</sup> These  
4 are remarkable increases and represent a categorical departure from previous years, especially  
5 when one considers that these numbers only encompass the first six months of 2018.

6 OPC was highly critical of KCPL's inability to properly expend funding for this program  
7 despite the apparent need in its last rate case (ER-2016-0285). In addition to the lack of  
8 publicity for the program and the inaccurate information listed, OPC cited a featured story  
9 widely shown throughout the Kansas City news in which power was shut-off for Ms. Kari  
10 White, a grandmother responsible for caring for her four-year-old granddaughter, Lee-Anna,  
11 who is blind, deaf, and diagnosed with cerebral palsy. Ms. White had contacted KCPL to  
12 explain her situation and even had the hospital fax a letter on the family's behalf. Lee-Anna's  
13 tragic situation was made all the worst given that funding for the ERRP remained unspent year-  
14 after-year.<sup>15</sup>

15 Clearly, those funds are being spent now and OPC supports both the Staff and KCPL and  
16 GMO's recommendations to maintain funding at the current levels.

17 **Q. Does OPC support a third-party evaluation?**

18 A. Possibly. OPC can see merit in such evaluation, especially considering that the two utilities  
19 have historically underspent available funds; however, given the relatively small amount of  
20 annual funding for this program OPC is hesitant to spend any more than a few thousand dollars.  
21 As an alternative, OPC recommends that the Salvation Army (who is responsible for the  
22 distribution of the ERPP funds) be invited to the aforementioned annual low-income  
23 stakeholder meeting later this year at KCPL's headquarters so it may provide primary feedback  
24 on the program and its design with other relevant stakeholders. This would appear to be a more  
25 prudent use of ratepayer dollars than allocating additional costs to a third-party consultant who

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<sup>14</sup> See also ER-2018-0145 and ER-2018-0146 Staff Cost of Service Report p. 127.

<sup>15</sup> See ER-2016-0285 Surrebuttal Testimony of Geoff Mark p. 4, 11 to p. 8, 22.

1 would conduct interviews and elicit feedback that would be similar or identical to the  
2 conversations that will presumably take place at the annual low income meeting.

3 **IX. ECONOMIC DEVELOPMENT RIDER**

4 **Q. What is Staff's position?**

5 A. Pages 57-64 of Staff's Cost of Service Reports include examples of Staff excluding Economic  
6 Development Rider revenues for customers where:

- 7 • Documentation of the EDR was not provided;
- 8 • A review of documentation provided indicated that the customer did not qualify for the  
9 EDR or continued receipt of the EDR; and
- 10 • The form of the EDR provided was improper.

11 Staff recommended that KCPL and GMO conduct a review of their customers to ensure  
12 compliance regarding the terms of their EDR tariffs and report the findings as part of their  
13 rebuttal testimony. Staff witness Sarah Lange also specifically recommended that KCPL and  
14 GMO's rebuttal testimony include, at a minimum, information:

- 15 1. Ensuring that the local, regional, or state governmental economic development  
16 incentives that are provided as qualification under the Availability provisions of tariff  
17 sheet 32E are actually awarded and accepted.
- 18 2. Ensuring that an annual load factor of 55% or greater has been maintained in years  
19 three through five of service under the EDR, as applicable, pursuant to tariff sheet 32E,  
20 Applicability Paragraph 1.
- 21 3. Review whether any load shifting has occurred in the case of expansion customers,  
22 pursuant to tariff sheet 32G, Incentive Provision Paragraph 2.

1           4. In the case of retention customers, review documentation provided regarding the  
2           availability of a viable electric supply option, pursuant to tariff sheet 32F, and the  
3           Termination provisions of tariff sheet 32H.<sup>16</sup>

4   **Q.    What is OPC's position?**

5   **A.**   OPC fully supports Staff's recommendations and is interested in seeing what KCPL and GMO  
6   file in rebuttal testimony.

7           Given both the apparent lack of utility administrative oversight and the increased level of  
8           economic development opportunities for the subsidization of certain commercial and industrial  
9           customers in light of SB 564, OPC further recommends that the Commission order both KCPL  
10          and GMO to file annual, publically-available reports that demonstrate that approved subsidies  
11          (cost-shifting incentives) are actually providing and maintaining the outcomes under the  
12          agreed-to terms in which they were approved. Such transparency is good for many reasons.

13          Some examples include:

- 14               • It holds subsidized companies accountable for the discounts received;
- 15               • Allows competing companies an opportunity to scrutinize each other's deals as well as  
16               small businesses the opportunity to examine the deals given to big businesses;
- 17               • Provides ratepayers, the Commission, and elected leaders the opportunity to decide for  
18               themselves if the increased cost shifting justifies the espoused benefits;
- 19               • Enables interested stakeholders and the public at large an opportunity to match up  
20               subsidized companies with campaign finance and lobbying data;
- 21               • Aids local governments in examining the geographic distribution of discounts and  
22               relevant regional impact; and
- 23               • Produces a transparent record for future policy consideration.

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<sup>16</sup> ER-2018-0145 & ER-2018-0146 Staff Report: Cost of Service p. 58

1 At a minimum, such reporting should include each and every EDR participant, the terms  
2 entered into, positive affirmation on the status of meeting said terms based on verified  
3 empirical data, and the estimated impact on the community of the participant.

4 **IX. CUSTOMER INFORMATION SYSTEM AND CUSTOMER CARE AND**  
5 **BILLING**

6 **Q. Please summarize KCPL and GMO's testimony on these topics?**

7 A. Company witnesses Charles A. Caisley and Forrest Archibald provide largely complementary  
8 testimony that includes a narrative description of the procurement, implementation, and  
9 expected outputs to be achieved with a fully functioning Customer Information System ("CIS")  
10 and Customer Care and Billing ("CCB") system in place.

11 **Q. What is OPC's position?**

12 A. Presently, the CIS/CCB systems are not fully operational and the costs associated with it are  
13 not finalized. It is OPC's understanding that true-up will provide an opportunity for accurate  
14 numbers and further review. That being said, OPC is both disappointed and concerned with  
15 the poor planning and inappropriate prioritization of KCPL and GMO's combined AMI, CIS  
16 and CCB deployment.

17 Simply put, *the* value proposition for AMI deployment and the accompanying CIS/CCB capital  
18 investments is the ability to offer dynamic pricing. Absent that deliverable, such large capital  
19 investments have to be considered imprudent. OPC is at a loss as to what value 15 minute  
20 interval data is if electricity is not priced on a time-of-use basis. As it stands, ratepayers will be  
21 paying hundreds of millions of dollars to have the opportunity to get what appears to be an  
22 excess variety of bill notification alerts (see GM-5).

23 For reference, other Commissions have rejected utility AMI deployment plans due to the  
24 uncertainty surrounding the benefits. For example, the Massachusetts Department of Public  
25 Utilities recently rejected National Grid, Eversource Energy and Fitchburg Gas and Electric  
26 Light Company's AMI deployment modernization plan stating:

1           The evidence in these cases revealed weaknesses in their business case for advancing  
2           metering functionality presented by each company and, therefore, we declined to  
3           preauthorize any customer-facing investments at this time. The Department weighed  
4           the significant costs associated with full achievement of advanced metering  
5           functionality using advanced metering infrastructure against the considerable  
6           uncertainty regarding benefits from reduced demand, capacity savings, and customer  
7           participation in time varying rates or other forms of dynamic pricing. We determined  
8           that the benefits of a full deployment of advanced metering functionality do not  
9           currently justify the costs.<sup>17</sup>

10           KCPL and GMO have had several years now to execute its business case which should have  
11           included the deployment of AMI meters, the implementation a CIS and CBB system *and* the  
12           education and roll-out of TOU rate design. All three need to be executed to produce optimal  
13           advanced metering functionality. Previous Commission Orders have stressed the importance  
14           and need for KCPL and GMO to proactively roll out TOU rates. For example,

15           The Non-Unanimous Stipulation and Agreement in ER-2016-0285 states:

16           GMO will include in its direct filing in its next rate case or rate design case a study  
17           of TOU rates for GMO including TOU residential and SGS rates, critical peak  
18           rates, Electric Vehicle TOU rates for stand-alone charging stations, TOU rates  
19           applicable to Electric Vehicle charging associated with an existing account, Real  
20           Time Pricing, Peak Time Rebates, and other rate types which could encourage  
21           load shifting/efficiency. GMO will propose rates based on this study no later than  
22           its next rate case or rate design case.<sup>18</sup>

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<sup>17</sup> See also The Commonwealth of Massachusetts, Department of Public Utilities Commission Order: DPU15-120, 15-121, 15-122 on 5/10/18

<sup>18</sup> ER-2016-0156 Non-Unanimous Stipulation and Agreement p. 10-11.

1 The Commission's Report and Order from ER-2016-0285 states:

2 Time of use rates (also known as demand response rates), better reflect cost  
3 causation than the current rate design and would create beneficial incentives for  
4 customers to reduce usage during system peak times. KCPL has smart meters  
5 installed for over 90 percent of its customers, yet does not have tariffs in place that  
6 would allow customers to benefit from demand response rates those meters would  
7 allow. Many other utilities already offer time-differentiated rates to residential  
8 customers. . . . Further, KCPL shall propose time-varying rate offerings for  
9 residential customers in its next rate case.<sup>19</sup>

10 The Commission's Order Establishing Special Contemporary Resource Planning Issues in EO-  
11 2017-0074 issued on October 26, 2016 states:

12 M. Study feasibility of providing all customers with interval meter data. Review  
13 the options available to provide customers with real-time, building level data,  
14 sub-meter, line and device level data.

15 N. Review plans to make Time of Use rates available to all customers.<sup>20</sup>

16 The Commission has been clear about its desire to implement TOU rates. Offering three pilot  
17 programs limited to 3,000 participants and only on the condition that the rates be married to an  
18 approved MEEIA filing in which the Company can claim both lost revenue and an earnings  
19 opportunity is both inappropriate and imprudent.

20 OPC is aware of no utility in the US that is able to claim energy efficiency savings through its  
21 rate design and introducing these TOU rates in this manner is clearly a work-around of the  
22 Commission's previous orders.

---

<sup>19</sup> ER-2016-0285 Report and Order p. 56-57

<sup>20</sup> EO-2017-0074 Order establishing special contemporary resource planning issues, p. 6

1 **Q. Would mandating TOU rates in this case solve this problem?**

2 A. No. Customers have had literally zero education, buy-in, or notification.<sup>21</sup> OPC would be  
3 concerned with the impact this could have on ratepayer's bills. KCPL and GMO should have  
4 already planned on rolling out TOU rates in this case. Instead they have elected to pass on these  
5 obvious benefits (at least until the next rate case, but potentially longer) and use the  
6 intermediate time to earn a return on and of an expensive "customer experience" platform.  
7 Which begs additional questions, such as why KCPL and GMO have gone to such great lengths  
8 to provide personalized messaging, Company branding, and differentiated notification. To be  
9 clear, KCPL and GMO operate as natural monopolies and have captive customers. There is  
10 very little, if any, branding value when customers have no choice.

11 **Q. Why wouldn't OPC support a more personalized "customer experience?"**

12 A. At some point, making further efforts becomes pointless. This is the law of diminishing  
13 marginal utility or "diminishing returns." According to Mr. Caisley:

14 The Company's current offering includes 26 notification types with 81 variations of  
15 those messages, depending on transaction details and customer types. With this initial  
16 go-live of the redesigned Customer Self-Service portals and Eloqua, the offering  
17 increases to 42 notification types with 238 variations accommodating transaction  
18 details and customer type.<sup>22</sup>

19 What is the marginal utility of adding an additional 157 variations of "customer experience"  
20 notifications that are largely (or solely) limited to: bill notification, energy efficiency, nefarious  
21 scam alerts, and outage information? According to the law of diminishing returns, there are  
22 three general principles the Commission and KCPL and GMO should be mindful of:

23 1.) Not every unit of input will lead to a proportional increase of output;

---

<sup>21</sup> OPC will expound more on this point as well as Staff's proposed rate design and the Company's inappropriate request to be rewarded with a MEEIA earnings opportunity for pricing service in rebuttal rate design testimony.

<sup>22</sup>ER-2018-0145 & ER-2018-0146 Direct Testimony of Charles A. Caisley p. 28, 19-23



1                   2.) At some point, adding more input gives you a decreasing rate of return; and

2                   3.) If you continue to add more input despite diminishing returns, you will reach a  
3                   stage where not only do you not get a positive return for every extra input, but you  
4                   decrease your overall output. This is known as a negative return.

5                   Restated, the law of diminishing returns suggests adding more frequent notifications through  
6                   more communication channels could increase the suboptimal behavior it hopes to mitigate. For  
7                   example, customers may begin to ignore messages and arrearages could increase. OPC is  
8                   unaware of any cost-benefit study to justify this business model.

9                   Despite the increase in the “Internet of Things,” electric service is not new. KCPL and GMO’s  
10                  customers are well versed in paying their electric bill at the end of each month. The past one  
11                  hundred plus years of industry service attests to this fact.

12                  **Q.     Would cutting back on “customer experience” notifications, even in the slightest, greatly**  
13                  **impact KCPL and GMO’s bottom line?**

14                  A.     No, they are a natural monopoly. Customers have literally no cost-effective option but to  
15                  choose to receive service from KCPL and GMO. If customer satisfaction is a priority for KCPL  
16                  and GMO, the leading metric has been, and remains, affordable and reliable electric service.  
17                  Unfortunately, the Company’s inability to concurrently plan on TOU education and roll-out  
18                  with its AMI/CIS/CBB systems means that rates will needlessly increase and large capital  
19                  investments will remain, in part, not fully operational because of poor organizational planning  
20                  and timing.

21                  **Q.     Does OPC have any recommendations to the Commission regarding this specific issue?**

22                  A.     Based off the Company’s direct testimony, OPC recommends a disallowance of five years of  
23                  depreciation expense for its One CIS system on a Missouri-jurisdictional basis. Furthermore,  
24                  the Commission should weigh these arguments in setting the Company’s ROE.

25

1 **Q. Does OPC have any other concerns regarding the CIS and CBB testimony?**

2 **A.** Yes. OPC made a series of recommendations in its direct testimony regarding the paramount  
3 importance of data privacy and customer consent. Parties to this case will no doubt respond to  
4 our recommendations in rebuttal. That being said, it is important to highlight at least one key  
5 concern from KCPL and GMO's direct testimony that underscore our recommendations.  
6 That is the need for proper safeguards regarding customer privacy especially as it pertains to  
7 third-party contractors. In our review of high profile data breaches one of the key variables in  
8 assessing vulnerability in a system rested on exposure from third-party contractors. Consider  
9 this point in light of Mr. Archibald's testimony which states:

10 Additionally, the One CIS Solution includes over 100 additional interaction points  
11 (interfaces and extensions) between the core system and the ancillary 50 plus edge  
12 applications with over 25 external vendor partners (e.g., Bill Print, Credit &  
13 Collections, POS ID, etc.) required to provide exceptional customer service.<sup>23</sup>

14 OPC DR-2021 requested a list of the external vendors necessary to provide exceptional  
15 customer service, that list is included in Figure 1:

16  

---

<sup>23</sup> ER-2018-0145 & ER-2018-0146 Direct Testimony of Forrest Archibald p. 12, 17-20.

1 Figure 1: 3<sup>rd</sup> Party vendors contracted for CIS/CBB service<sup>24</sup>

1.) AEG	16.) ICF
2.) AllConnect	17.) KS LIHEAP
3.) Broadridge	18.) Kubra/iFactor
4.) CCS	19.) MO LIHEAP
5.) ChargePoint	20.) Nexant
6.) ClearResult	21.) OPower
7.) CrediWorld	22.) Oracle Sales Cloud
8.) DataRaker (Oracle)	23.) Wells Fargo Ebox & ACH
9.) Eloqua (SFCG)	24.) WEST
10.) Experian	25.) Western Union
11.) Federal Reserve	26.) VOXAI
12.) FiServe (Checkfree)	
13.) Hallmark	
14.) Harris and Harris	
15.) I2SMS	

2

3

4

5

6

The Commission should also be mindful that it is reasonable to assume that many (or all) of these vendors likely have sub-contracts with additional vendors. With the advent of interval data and more finite personalized customer information the need to ensure proper procedures and routine inspections is imperative.

7

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

8

**A. Yes.**

9

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<sup>24</sup> See GM-6.

KCPL  
Case Name: 2018 KCPL Rate Case  
Case Number: ER-2018-0145

Response to Marke Geoff Interrogatories - OPC\_20180625  
Date of Response: 7/13/2018

Question:2032

Please provide a copy of any all EPRI monthly county level 'new vehicle' registration data and quarterly zip-plus 4 vehicle registration data to develop the vehicles in operation for each of the KCPL service territories and referenced in the direct testimony of Charles A. Caisley p. 11, 18-19 thru p. 12, 1-3.

Response:

EPRI provides the 'new vehicle sales' and 'county vehicle registration' data in summary form in the attached spreadsheets from January 2018.

- Q2032\_EPRI-201801-KCPL\_ALL.xls
- Q2032\_EPRI-201801-KCPL\_GMO.xls
- Q2032\_EPRI-201801-KCPL\_MO.xls
- Q2032\_EPRI-201801-KCPL\_KS.xls

The attached spreadsheet was used to calculate the summary table of vehicles in operation.

- Q2032\_EV in operation table.xls

Response provided by Ed Hedges

Attachments:

Q2032\_EPRI-201801-KCPL\_ALL.XLSX  
Q2032\_EPRI-201801-KCPL\_GMO.XLSX  
Q2032\_EPRI-201801-KCPL\_KS.XLSX  
Q2032\_EPRI-201801-KCPL\_MO.XLSX  
Q2032\_EV in operation table.xlsx  
Q2032\_Verification.pdf

	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Plug-in hybrid electric vehicles (PHEVs)	0	39	163	198	233	131	262	344	27	1396
Battery electric vehicles (BEVs)	0	2	36	104	73	116	301	355	19	1007
Hybrid electric vehicles (HEVs)	1776	1701	2752	3409	2974	2076	2582	3370	186	20825
Conventional vehicles (CVs) and other	85545	94119	103322	110508	122825	126212	127184	127160	8581	905455

KCPL  
Case Name: 2018 KCPL Rate Case  
Case Number: ER-2018-0145

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Date of Response: 7/13/2018

Question:2032

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Q2032\_EPRI-201801-KCPL\_MO.XLSX  
Q2032\_EV in operation table.xlsx  
Q2032\_Verification.pdf

KCPL - ALL

type	201412	201506	201512	201606	201609	201612	201703	201706	201709	201712*
BEV	245	302	414	531	613	723	934	1066	1162	1244
CV	2197670	0	2237976	2261213	2275691	2397083	2403202	2423202	2419858	
HEV	22613	23519	24590	25499	26345	26777	27384	27873	28468	
PHEV	560	625	725	831	993	1130	1238	1337	1444	1545
PEV	805	927	1139	1362	1607	1853	2172	2403	2606	2789
	805	927	1139	1362	1607	1853	2172	2403	2606	<b>2789</b>
%phev	70%							56%	55%	55%
%bev	30%							44%	45%	45%

Data from Jan 2018 EPRI EV reports 'vlo\_by\_type' tab - This data derived from County vehicle registration data.

\* Derived by adding the 2017 Q4 new vehicle sales from the 'by\_type' to the Q3 number of vehicle in operation

KCPL-MO

type	201412	201506	201512	201606	201609	201612	201703	201706	201709	201712*
BEV	82	101	142	187	205	244	319	373	395	430
CV	742490	0	757622	767754	772826	809176	811740	819725	820797	
HEV	6989	7337	7628	7957	8195	8370	8697	8807	8987	
PHEV	183	218	246	290	341	397	438	468	505	542
PEV	265	319	388	477	545	641	757	842	900	972

KCPL-KS

type	201412	201506	201512	201606	201609	201612	201703	201706	201709	201712*
BEV	132	162	218	271	329	385	490	552	613	650
CV	848748	0	866100	872197	880033	931306	931600	938267	935597	
HEV	11593	11954	12561	12928	13416	13584	13718	13996	14302	
PHEV	269	284	338	376	466	523	565	624	681	732
PEV	401	446	556	647	795	909	1055	1176	1294	1382

KCPL-GMO

type	201412	201506	201512	201606	201609	201612	201703	201706	201709	201712*
BEV	31	40	54	73	79	94	125	141	153	163
CV	606432	0	614254	621263	622832	656602	659862	665210	663464	
HEV	4030	4228	4401	4613	4734	4822	4968	5071	5179	
PHEV	109	123	141	165	187	209	234	245	258	271
PEV	139	162	195	238	266	304	360	386	411	434

KCPL  
Case Name: 2018 KCPL Rate Case  
Case Number: ER-2018-0145

Response to Marke Geoff Interrogatories - OPC\_20180625  
Date of Response: 7/13/2018

Question:2034

Please provide a copy of any and all studies (and/or work papers) utilized to substantiate the statement made in Charles A. Caisley's direct testimony p. 12, 12-17 which states:

a. Yes, in addition to the number of unique drivers using the Clean Charge Network, the number of charge sessions and the energy dispersed are metrics that illustrate the growth in use of the Clean Charge Network. Over the same (3) year period, the number of monthly charge sessions has grown steadily from 513 to 16,162 for a 216% compounded annual growth rate and the energy dispersed monthly has increased from 4,028 kWh to 117,355 kWh (208% compounded annual growth rate).

Response:

The data was generated directly from the ChargePoint system using one of their standard reports. The attached spreadsheet, 'Q2034\_CCN Usage Statistics 2015-2017.xls', contains the unique driver, charge sessions, and energy dispensed data as reported by ChargePoint and used to calculate the compounded annual growth rates.

Response provided by: Wendy Marine

Attachments:

Q2034\_CCN Usage Statistics 2015-2017.xlsx  
Q2034\_Verification.pdf



Date	Unique Dri	No. of Ports
1/1/2015	86	42
2/1/2015	89	42
3/1/2015	132	112
4/1/2015	166	114
5/1/2015	210	216
6/1/2015	278	266
7/1/2015	312	290
8/1/2015	409	304
9/1/2015	420	340
10/1/2015	449	560
11/1/2015	501	602
12/1/2015	531	664
1/1/2016	540	732
2/1/2016	562	806
3/1/2016	647	910
4/1/2016	693	966
5/1/2016	731	1022
6/1/2016	806	1128
7/1/2016	863	1180
8/1/2016	959	1260
9/1/2016	1014	1288
10/1/2016	1058	1344
11/1/2016	1065	1376
12/1/2016	1190	1472
1/1/2017	1263	1552
2/1/2017	1319	1632
3/1/2017	1437	1662
4/1/2017	1485	1694
5/1/2017	1601	1726
6/1/2017	1701	1748
7/1/2017	1713	1760
8/1/2017	1815	1810
9/1/2017	1901	1836
10/1/2017	1914	1860
11/1/2017	1975	1860
12/1/2017	2092	1862

CAGR            190%                    249.1836   722.0057            2092

KCPL  
Case Name: 2018 KCPL Rate Case  
Case Number: ER-2018-0145

Response to Marke Geoff Interrogatories - OPC\_20180625  
Date of Response: 7/13/2018

Question:2026

Referencing the direct testimony of Charles A. Caisley p. 9, please provide the following:

- a. List of every community outreach and marketing activities related to the CCN including, but not limited to, a copy of each brochure, log of telephone calls, telephone contact script, advertising message, website reference and/or political lobbying contact;
- b. A description of the KCPL developed EV driver affinity group including total membership numbers and activities;
- c. Total number of outreach and training contacts with any local car dealerships including the topic of "training;"
- d. List each element of the multi-pronged advertising" approach;
- e. List of any and all EV or EVCS events in the past three years;
- f. A full description of the customer microsite; and
- g. List each item in a-f above and indicate whether costs were charged to shareholders or ratepayers. If ratepayers, list the dollar amount, the account #, and services charged.

Response:

A: While KCP&L hasn't conducted marketing activities related to the Clean Charge Network charging stations, we have conducted marketing and outreach activities related to EV adoptions and education. Below is a general list of those activities:

Flag bases	148.97
Flags	772.86
Maker Faire Banner	54.38
Charging Station Demo	4960.00
Car graphics	169.57
Car Graphics	1379.98
Event Branding	172.97
Pop Up Banners	1416.97

Koozies	1413.08
Shirts	399.19
USB Chargers	1281.96
Middle of the Map Festival	10000.00
Maker Faire	2500.00
Renewables Conference	1000.00
Kansas City Star Event	5562.50
Lunch and Learn	325.09
Shirts	1816.59
Boulevardia Sponsorship	10000.00
Driver Event	1510.00
Promotional Products	15487.89
Driver Event	572.87
Drive Electric Week Event	149.80
Business Wire	1542.25
Facebook ads	119.53
Facebook ads	5.77
Facebook ads	119.66
Facebook ads	115.06
Facebook ads	340.28
Facebook ads	476.87
Facebook ads	206.13
Digital Ads	17762.06
Digital Ads	1912.50
Digital Ads	750.00
Digital Ads	6680.59
Digital Ads	1000.00
GREENABILITY Ad	780.00
HARVEST GRAPHICS LLC	604.62
Moo.com printing biz cards	239.75
Facebook ads	407.39
May EV event	2800.00
Driver Event	455.98
Home Show	3750.00
Website build	35000
KCUR ads	936.00
Kansas City Zoo Event	4000.00
Cookies for Dealerships	303.00
PBS Event	4500.00
Website build	2635.00
Zoo Event	5500.00
Electric Car Insider Ride and Drive	29400.00
Social ads Jan1- May 18	5000.00
Digital Ads	620.00
Digital Ads	607.14
Greenability ad	2340.00
River Market Event	184.87
Social ads May 19-Jun 13	4260.33
EV Driver Event	1484.86

**B: Description:** A group of area individuals who drive electric cars or are interested in driving electric vehicles.

**Membership Number:** 1260

**Activities:** Events, Newsletters, Facebook Group, Education  
\$20,000 a year

**C: Contacts:** 25

**Topics:** EV 101, Ways to Charge an EV, EV models  
\$8000 a year

**D: Events, Social Media, Website, Newsletter, Media Relations, Collateral, Digital ads, Word of Mouth, Kiosks, Blogs**

**E:**

- Greater Kansas City Home Show - \$5000
- Get Your Green on at the River Market \$0
- Mo Society of Professional Engineers Conference \$0
- Prairie Village Earth Fair \$0
- Art of the Machine River Market \$0
- The Great Car Show \$200
- KC Green Fair \$0
- Jewish Culture Fest
- EV Futures Panel \$5,000
- EV Day at the Zoo \$5,000
- Coffee with Clean Charge \$500
- Prairie Village Drive Electric Week
- Electric Car Insider \$29,000
- Posty Cards Employee Event \$700
- MindDrive Festival Non-ratepayer
- Fleet Managers Meeting \$1,000
- Black and Veatch Drive Electric Week \$0
- KCPT Members Event with the Elders \$4,500
- Announcement/ Press Conference
- Middle of the Map Festival \$10,000
- Boulevardia \$10,000

**F:** An online site to learn about driving electric and gain information about available EV models and where to find one. Information on costs, charging, car models, EV news and driver profiles.

Link: [www.cleanchargenetwork.com](http://www.cleanchargenetwork.com)

\$35,000. Cost to develop website.

G: Marketing efforts and costs for the Clean Charge Network have been designed to increase EV adoption, outreach and education and have not been focused on Clean Charge Network stations. These education and outreach costs are charge to ratepayers. For EV marketing, outreach, adoption and education efforts, KCP&L spends \$250,000 per year. Account number: 910000

Here is an example of our 2018 EV outreach budget plan:

Item	Budgeted
Collateral	\$ 8,000.00
Email	\$ 1,000.00
Advertising (online & social)	\$ 60,000.00
Sponsorships & Events	\$ 50,000.00
Contractor Services	\$ 98,000.00
Website and Video	\$ 15,000.00
Dealer Relationships	\$ 8,000.00
Contingency	\$ 10,000.00
<b>TOTAL</b>	<b>\$ 250,000.00</b>

Response provided by: Jeffrey Beeson

Attachments:

- Q2026\_Drive Kit.png
- Q2026\_DealCharger.jpg
- Q2026\_Digital Ad 3.jpg
- Q2026\_Digital Ad 4.jpg
- Q2026\_Digital Ad 5.jpg
- Q2026\_Digital ad.jpg
- Q2026\_Digital Ad6.JPG
- Q2026\_DigitalAd2.jpg
- Q2026\_Drive Electric Week PressRelease.docx
- Q2026\_EVCards.JPG
- Q2026\_Facebook Ad 4.png
- Q2026\_Facebook ad.jpg
- Q2026\_Facebook Ad1.png
- Q2026\_Facebook Ad2.png
- Q2026\_Facebook Ad3.png
- Q2026\_FuturesPanelPressRelease.docx
- Q2026\_PressRelease.docx
- Q2026\_Shirt.jpg
- Q2026\_Verification.pdf
- Q2026\_website.pdf
- Q2026\_Verification.pdf

KCPL  
Case Name: 2018 KCPL Rate Case  
Case Number: ER-2018-0145

Response to Marke Geoff Interrogatories - OPC\_20180625  
Date of Response: 7/13/2018

Question:2046

Please provide the nine different overall options for telling the Company how customers would like to be communicated with as referenced in the direct testimony of Charles A. Caisley p. 26.

Response:

The preference center in the online portals provides the following options for notifications:

- Bill Ready notifications by email
- Bill Ready notifications by text message
- Bill Reminder notifications by email
  - Customer can specify days in advance they want the notification
- Bill Reminder notifications by text message
  - Customer can specify days in advance they want the notification
- Payment notifications by email
- Payment notifications by text message
- Pay by Text – text only
- Service changes – email only
- Other marketing communications by email

**Information provided by:** Nikki Johnson

**Attachments:**

Q2046\_Verification.pdf

KCPL GMO  
Case Name: 2018 GMO Rate Case  
Case Number: ER-2018-0146

Response to Marke Geoff Interrogatories - OPC\_20180625  
Date of Response: 7/16/2018

Question:2021

Referencing the direct testimony of Forrest Archibald, p 12, 17-20 please provide a list of:

- a. The over 100 additional interaction points (interfaces and extensions) between the core systems;
- b. The ancillary 50 plus edge applications; and
- c. The over 25 external vendors required to provide customer service as well as the unique service said vendor provides.

Response:

The final delivered solution for One CIS included 52 extensions and 73 interfaces for a total of 125 interaction points between the core systems. An extension is an addition made to the base product to enable and support KCP&L business processes or functionality. An interface is a data exchange between core systems to enable or support business processes or functionality. One CIS utilized naming standards to manage and distinguish between an extension, prefixed with 'BNH' and a three-digit number ('XXX'), and an interface for Customer Care and Billing (CCB), prefixed with 'INT' and a three-digit number ('XXX') and an interface for Customer Self Service Web Portals (CSS), prefixed with 'CSS' and a three-number ('XXX'). Each interface exchanged data between an internal edge application and/or external vendor. Below is the list of the final 125 interaction points, using the naming standard described above, to include the related internal edge application and/or external vendor.

\* The external vendors are noted with an asterisk.

#	Type	Name/Description	Edge Application/External Vendor Source	Edge Application/External Vendor Target
1	ENH012	Postpone or Cancel Severance Event based on certain Reason	N/A	N/A
2	ENH025	Custom Payment Distribution Algorithm	N/A	N/A
3	ENH029	Validate Credit Refund	N/A	N/A
4	ENH031	Create Customer Rebate	N/A	N/A

5	ENH069	Field Level Security	N/A	N/A
6	ENH082	Auto Delete Partial FAs	N/A	N/A
7	ENH086	Notification Letter on Service Transfers Or Disconnection	N/A	N/A
8	ENH099	Budget Billing Eligibility with Override	N/A	N/A
9	ENH105	Contract Validation Alerts on Account Close	N/A	N/A
10	ENH119	Cancel Severance Process aged In X days	N/A	N/A
11	ENH121	FA Completion Adjustment	N/A	N/A
12	ENH122	Automatic Deposit Interest Refund to Overpayment SA	N/A	N/A
13	ENH124	Default New Account Info based on Existing Account	N/A	N/A
14	ENH127	Billing Information by Service Agreement	N/A	N/A
15	ENH128	Annual Base Demand Calculation	N/A	N/A
16	ENH132	Net Metering Credit	N/A	N/A
17	ENH134	Field Activity Schedule Hold	N/A	N/A
18	ENH140	Store Payment Customer Info	N/A	N/A
19	ENH146	Automatic Stop for Premise based deposit	N/A	N/A
20	ENH147	Deposit Installment	N/A	N/A
21	ENH150	Budget Billing Program	N/A	N/A
22	ENH153	Default To Do with Current Account Context Info	N/A	N/A
23	ENH159	CSR Payment Portal	N/A	N/A
24	ENH166	Premise Tree Portal	N/A	N/A
25	ENH172	Account Financial History	N/A	N/A
26	ENH173	Automated Seasonal Budget	N/A	N/A
27	ENH175	Charitable Contribution	N/A	N/A
28	ENH177	Dynamic GL Assign	N/A	N/A
29	ENH178	Case Transition from FA Complete	N/A	N/A
30	ENH182	Cut for Non Pay Identifier	N/A	N/A
31	ENH183	Customer Enrolled Program Information	N/A	N/A
32	ENH184	Rate Compare	N/A	N/A
33	ENH185	Multiple CIS Division and	N/A	N/A



		Account Default		
34	ENH187	Auto Cancel Late Fees for Cancelled Bseg	N/A	N/A
35	ENH189	Cancelation of DataRaker Field Activities	N/A	N/A
36	ENH191	Collection Agency Selection	N/A	N/A
37	ENH194	Transfer By Distribution Code	N/A	N/A
38	ENH195	Manual ToDo and Customer Contact Creation	N/A	N/A
39	ENH196	Late Payment Calculation	N/A	N/A
40	ENH197	Writeoff by Premise or SA	N/A	N/A
41	ENH198	Notification preferences	N/A	N/A
42	ENH200	Premise Address Secondary Unit Validation	N/A	N/A
43	ENH202	Collection Criteria Algorithm	N/A	N/A
44	ENH203	Stepped Service Quantity	N/A	N/A
45	ENH205	Check Final Bill Segment	N/A	N/A
46	ENH207	Historical Portal	N/A	N/A
47	ENH209	Account Autopay Controls	N/A	N/A
48	ENH210	Tax Exempt Expiry Letter	N/A	N/A
49	ENH211	Dashboard Portals	N/A	N/A
50	ENH220	Distribution Code GL	N/A	N/A
51	ENH221	Cyclical_Non_Cyc_Usage, Custom SA Sync Filter ,Reinstate Adjustment, Long Bills	N/A	N/A
52	ENH230	Good Customer	N/A	N/A
53	CSS001	Start Stop Transfer Service	CSS	CCB
54	CSS002	One time and Auto-payments and Budget Billing	CSS	CCB
55	CSS003	Billing Paperless Preference	CSS	CCB
56	CSS004	Search and Manage Accounts Details	CSS	CCB
57	CSS005	User Profile and Authorization Management	CSS	CCB
58	CSS006	Miscellaneous Account Admin Features	CSS	CCB
59	CSS008	View Account and Property Information	CSS	CCB
60	CSS010	View Bills, Bill Inserts and Transactional Data	CSS	CCB Broadridge*

61	CSS011	Customer Reports	CCS	CCB MDM
62	CSS013	View Current Estimated Interactive Bill	CCS	CCB
63	CSS015	Opower, Kubra/iFactor and Olameter	CSS	CCB
64	CSS016	Alert Notifications and Self Service Preferences	CSS	CCB Kubra/iFactor*
65	CSS017	Contact KCPL Energy Consultant	CSS	CCB
66	CSS018	Public Web Forms	CSS	CCB NMS
67	CSS023	AgencyLink Grants	CSS	CCB
68	CSS024	ACH Credit	CSS UMB*	CCB
69	CSS025	Identity Management	CSS	CCB Azure
70	INT003	Construction Orders	CCB	STORMS
71	INT005	Geographic Data	AMFM	CCB
72	INT007	Master Data Sync	CCB	MDM
73	INT008	Billing Determinants	CCB	MDM
74	INT009	Replacement Reads	CCB	MDM
75	INT010	Rate Check	CCB	MDM
76	INT011	Service Orders	CCB SOM PCAD	CCB SOM PCAD
77	INT012	Service Investigation Orders	DataRaker*	CCB
78	INT012	Service Investigation Orders	ODM	SOM
79	INT016	Cut List and Service Investigation Orders	SOM	NMS
80	INT018	Bill Print Extract	CCB	Broadridge*
81	INT019	View Bill Image - View Bill Image	CCB	Broadridge*
82	INT019	View Bill Image - View Bill Image	CCB	Eloqua*
83	INT020	Bill Summary Management	CCB	FIServ*
84	INT022	Real Time Payments	Western Union*	CCB
85	INT023	Batch Payments	Creditworld* Harris and Harris* State of MO* UMB* Wells Fargo*	CCB
86	INT024	Account Information Extract	CCB	UMB*

				Wells Fargo* Western Union*
87	INT025	Autopay Extract	CCB	Wells Fargo* Western Union*
88	INT026	Returned Items	Creditworld* Harris and Harris* UMB* Wells Fargo*	CCB
89	INT027	State Agency Assistance Grants (LIEAP/LIHEAP)	State of KS* State of MO*	CCB
90	INT029	Bank Routing Number	Federal Reserve*	CCB
91	INT031	Collection Agency Referrals	Creditworld* Harris and Harris*	CCB
92	INT032	C&C Outbound Dialing	CCB	CCS
93	INT034	Accounts Payable (A/P)	CCB	PeopleSoft
94	INT035	General Ledger Extract	CCB	PeopleSoft
95	INT036	Mailing Address Updates	Broadridge*	CCB
96	INT037	Marketing Data Extract	AEG* ClearResult* ICF* Nexant* Opower*	CCB
97	INT039	POSID (Customer Verification)	CCB	Experian*
98	INT041	IVR (Interactive Voice Response)	Customer IVR VOXAI* vendor provided coding services	CCB
99	INT042	CCB to CCB To Eloqua Outbound (1010, 1020, 1030, 10)	CCB	Oracle Sales Cloud*
100	INT043	AllConnect	CCB	AllConnect*
101	INT044	Program Enrollment	CCB	AEG* Nexant* Opower*
102	INT045	Eloqua to CCB Inbound (2000 Series)	Eloqua*	CCB
103	INT046	Autopay Maintenance	Western Union*	CCB
104	INT048	CTI Pop	Customer IVR VOXAI* vendor provided coding services	CCB/CTIPop
105	INT049	Document Management	CCB	NetFYI
106	INT050	Rate Information Extract	CCB	UIPlanner

107	INT056	Charge Point	ChargePoint*	CCB
108	INT057	Collection letter Extract	CCB	Broadridge*
109	INT062	Hallmark Cards	CCB	Hallmark*
110	INT063	Non-reg Product Enrollment	ClearResult*	CCB
111	INT065	MO LIHEAP Customer Usage Extract	CCB	MO State*
112	INT068	CCC Letters	CCB	CCC Letters
113	INT070	Customer Data Sync (DataRaker)	CCB MDM	DataRaker*
114	INT072	Bill Cycle Assignment	CCB MDM	MDM CCB
115	INT073	Integration Messaging Controls	Reporting	Reporting
116	INT901	Scheduled Read Download	MDM	Itron FCS
117	INT902	Pickup Order (PCAD Mobile to SOM)	STORMS	MDM
118	INT904	Street and Leased Light Summarized Inventory	STORMS	MDM
119	INT906	Lodestar	MDM	Lodestar
120	INT908	Customer Data Sync	MDM	NMS
121	INT909	Customer Data Sync	MDM	WEST* AMFM
122	INT911	Outage IVR Web Services	WEST*	NMS
123	INT912	OK on Arrival	NMS	WEST* CCB
124	INT913	Service Point Updates from Itron FCS	Itron FCS	MDM
125	INT914	Itron FCS Meter Read Upload changes	MDM	Itron FCS

Summary of External Vendors:

#	External Vendor	Vendor Function
1	AEG	Solar Program Enrollment/Rebates
2	AllConnect	Confirms start service/assists with other services
3	Broadridge	Bills/Letters
4	CCS	Credit & Collection Outbound Dialing
5	ChargePoint	Electric Vehicle Station Billing
6	ClearResult	Marketing Product Enrollments (Thermostat, Surge

		Protection, etc)
7	CreditWorld	Collection Agency Referrals/Payments
8	DataRaker (Oracle)	Revenue Protection Analysis
9	Eloqua (SFCG)	Customer Notification Preferences (Ebills)/Marketing Communications
10	Experian	Customer Verification (POSID)
11	Federal Reserve	Obtain Bank Routing Information
12	FiServ (Checkfree)	Bill Summary Management/Payments
13	Hallmark	Hallmark Cards to Customers
14	Harris and Harris	Collection Agency Referrals/Payments
15	I2SMS	SMS Customer Notification (Texting)
16	ICF	Energy Efficiency Programs
17	KS LIHEAP	State Agency Assistance Grants/Payments
18	Kubra/iFactor	Outage Map/Customer Outage Notifications
19	MO LIHEAP	State Agency Assistance Grants/Payments
20	Nexant	DSM program enrollments (Demand Side Management)
21	Opower	Customer Energy Profile
22	Oracle Sales Cloud (SFCG-Motiv)	Customer Relationship Management (CRM)
23	UMB	Payments
24	Wells Fargo Ebox Wells Fargo ACH	Payments
25	WEST	Outage IVR
26	Western Union	Payments (Real Time/Credit Card)
27	VOXAI	Customer IVR

Response provided by: Lois Stark

Attachment: Q2021\_Verification.pdf