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DIRECT TESTIMONY

OF

GEOFF MARKE

Submitted on Behalf of
The Office of the Public Counsel

KANSAS CITY POWER & LIGHT COMPANY

Case No. ER-2016-0285

December 14, 2016

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KANSAS CITY POWER & LIGHT COMPANY
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1 **I. INTRODUCTION**

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

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

5 **Q. Are you the same Dr. Marke that filed direct "revenue requirement" testimony in ER-**
6 **2016-0285?**

7 A. Yes.

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

9 A. To respond to the Commission's order directing consideration of certain questions in
10 testimony. Specifically:

- 11 • Installation of advanced metering infrastructure ("AMI") for residential and
12 commercial customers;
- 13 • Plug-in electric vehicle ("EV") rates;
- 14 • Optional residential time-of-use rates (hourly) and time-of-day rates;
- 15 • Property Assessed Clean Energy programs ("PACE"); and
- 16 • Pay As You Save programs ("PAYS").

1 **II. RESPONSE TO COMMISSION DIRECTED QUESTIONS**

2 **Installation of advanced metering infrastructure (“AMI”) for residential and**
3 **commercial customers**

4 **Q. What is OPCs position on AMI for residential and commercial customers?**

5 A. As a general concept, a plausible economic case may be made for the deployment of AMI
6 technology coupled with an easily understood and accepted time-of-use (“TOU”) rate design.
7 However, according to the Brattle Group, about a third of all U.S. households are now
8 receiving electric service through AMI but only 2% are buying the energy portion of their
9 electric bill on a TOU plan.¹ Absent a TOU rate design it becomes more difficult to cost
10 justify the infrastructure on a stand-alone basis. Moreover, it is important to factor in the
11 additional complementary costs that would necessitate successful full-scale AMI deployment
12 such as modified or new customer information systems (“CIS”), consumer education and
13 marketing, as well as security and privacy liability concerns. Any definitive answer on the
14 appropriateness of full deployment would need to be judged on the individual merits and
15 unique circumstances of the utility involved.

16 Timing, as it relates to the current useful life of meters presently in place would also need to
17 be considered. Over a long enough timeline, AMI meters (or some more advanced
18 technology) may prove to be the default option. Automatic meter reading (“AMR”)
19 technology could very well become obsolete in the future. However, today, Missouri
20 stakeholders can observe lessons learned from other states farther along in this process and be
21 prepared to act accordingly if the situation merits further consideration.

22 For KCPL, the time for an open and robust dialogue about expectations and parameters will
23 likely begin in the near future presumably as the Company finishes its system-wide AMI and

¹ Farugui, A., R. Hledkick & N. Lessem (2014) Time-varying rates from the get-go—not just by opt-in. Smart by Default. *Public Utilities Fortnightly*. <https://www.fortnightly.com/fortnightly/2014/08/smart-default>

1 CIS installation. As it stands, OPC takes no formal position at this time in regards to AMI
2 deployment in the KCPL service territory.

3 **Plug-in electric vehicle (“EV”) rates**

4 **Q. What is OPCs position on plug-in EV rates?**

5 A. OPC supports the use of a specialized plug-in EV rate to better reflect the real price of
6 electricity. At this stage, a TOU rate similar to what is offered in the Commission’s
7 referenced Georgia Power rate design would appear to be a viable option.

8 As it stands, OPC has not formally proposed an EV-specific, TOU, opt-in rate in this case.
9 We would be willing to provide input and participate in dialogue on the matter if other parties
10 have specific proposals or if the Commission wishes to continue this discussion in a separate
11 docket.

12 **Optional residential time-of-use rate (hourly) and time-of-day rate**

13 **Q. What is OPCs position on TOU rates?**

14 A. OPC supports the use of TOU rates on an opt-in basis; however, OPC has not developed a
15 specific TOU rate for this case. We would be willing to provide input and participate in
16 dialogue on the matter if other parties have specific proposals or if the Commission wishes to
17 continue this discussion in a separate docket.

18 **Property Assessed Clean Energy (“PACE”)**

19 **Q. What is OPCs position on PACE?**

20 A. To be clear, OPC does not believe that the PACE financing falls under the Commission’s
21 oversight. Missouri enacted PACE legislation in 2010 (HB 1692) that authorizes the
22 formation of clean energy development boards by one or more municipalities for the purpose
23 of establishing PACE programs (Section 67.2800 – 67.2835 RSMo). PACE programs allow

1 property owners to fund energy efficiency and renewable energy projects with little or no up-
2 front costs. With PACE, eligible property owners living within a local government area that
3 has adopted PACE can finance up to 100% of their project and pay it back over time as a
4 voluntary property tax assessment through their existing property tax bill. Rather, PACE
5 financing can best be understood as a complementary financing tool to promote utilities
6 Commission-approved energy efficiency programs—primarily for commercial and industrial
7 customers.² Where available, OPC supports the use of this financing option and has been a
8 vocal advocate for its ability to enable upgrades in energy efficiency related activities. It has
9 been OPC’s experience that this perspective is shared amongst stakeholders (including
10 KCPL) and is optimistic that PACE financing will enable more future cost-effective savings
11 moving forward. OPC has no formal recommendations to the Commission regarding PACE
12 financing.

13 **Pay As You Save (“PAYS”)**

14 **Q. What is OPCs position on PAYS?**

15 **A.** OPC has taken a lead in researching and investigating the appropriateness of offering a PAYS
16 tariff to ratepayers. PAYS is an on-bill loan, tariff-based financing system that utilities can
17 use to enable ratepayers to have control over their electric bills through energy efficiency
18 upgrades. Discussions are currently taking place to develop a financial feasibility study with
19 one electric utility which, if successful, may be extended to other utilities if appropriate. OPC
20 believes that the upfront capital costs are a major impediment to deep energy and demand
21 savings on the residential side. This is especially true for low and middle income
22 homeowners and renters. As articulated at a recent Commission Agenda, The PAYS tariff
23 program has had quantifiable success for both utilities and ratepayers alike in economically-
24 depressed regions of Kentucky, Kansas and Arkansas. If these results are transferable to
25 Missouri it would help mitigate cost shifting expenditures for families that can least afford

² It is OPC’s understanding that PACE financing is largely unavailable to residential properties unless said property is wholly owned by the resident.

1 further electric burdens. As it stands, OPC plans to continue the investigation into this
2 program with an acute focus on ensuring that appropriate consumer protections are
3 maintained. OPC has no formal recommendations to the Commission regarding the PAYS
4 tariff as it pertains to KCPL in the present case.

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

6 **A. Yes.**