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MISSOURI PUBLIC SERVICE COMMISSION

KANSAS CITY POWER & LIGHT COMPANY

KCP&L GREATER MISSOURI OPERATIONS COMPANY

CASE NOs. ER-2018-0145 and ER-2018-0146

DIRECT TESTIMONY

OF

MARTIN R. HYMAN

ON

BEHALF OF

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

DIVISION OF ENERGY

Jefferson City, Missouri

July 6, 2018

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

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

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

AFFIDAVIT OF MARTIN R. HYMAN

STATE OF MISSOURI)
) **ss**
COUNTY OF COLE)

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

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



Martin R. Hyman

Subscribed and sworn to before me this 29th day of June, 2018.

| |
|---|
| LAURIE ANN ARNOLD Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: April 26, 2020 Commission Number: 16808714 |
|---|



Notary Public

My commission expires: 4/26/20

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1 **I. INTRODUCTION**

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

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

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

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

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

9 A. In 2011, I graduated from the School of Public and Environmental Affairs at Indiana
10 University in Bloomington with a Master of Public Affairs and a Master of Science
11 in Environmental Science. There, I worked as a graduate assistant, primarily
12 investigating issues surrounding energy-related funding under the American
13 Recovery and Reinvestment Act of 2009. I also worked as a teaching assistant in
14 graduate school and interned at the White House Council on Environmental
15 Quality in the summer of 2011. I began employment with DE in September, 2014.
16 Prior to that, I worked as a contractor for the U.S. Environmental Protection Agency
17 to coordinate intra-agency modeling discussions. Since joining DE, I have been
18 involved in a number of utility cases and other proceedings before the Missouri
19 Public Service Commission (“Commission”) as DE’s lead policy witness and have
20 assisted DE on legislative issues and the development of the Comprehensive
21 State Energy Plan. Topics that I address as a part of my duties include rate design,
22 demand-side programs, in-state energy resources, renewable energy, electric
23 vehicles (“EVs”), and grid modernization.

1 **Q. Have you previously filed testimony before the Commission on behalf of DE**
2 **or any other party?**

3 A. Yes. Please see Schedule MRH-Dir1 for a summary of my case participation.

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

5 **Q. What is the purpose of your Direct Testimony in this proceeding?**

6 A. The purpose of my testimony is to provide general information about residential
7 rate design. I also describe DE's proposals to 1) continue the transition away from
8 the declining block rates employed by Kansas City Power & Light Company
9 ("KCP&L") and KCP&L Greater Missouri Operations Company ("GMO")
10 (collectively, "Companies") for residential general use¹ customers during the
11 winter, as well as 2) implement inclining block rates for GMO's residential general
12 use customers during the summer. These transitions, which should be based on
13 bill impact analyses, will provide better price signals to residential customers and
14 thereby encourage energy efficiency.

15 To address potential impacts on electric vehicle users from inclining block rates,
16 DE recommends outreach by the Companies to identify EV drivers so that they
17 may be informed of potentially beneficial time-of-use rates. DE also recommends
18 customer education for the broader residential general use classes.

¹ I use the phrase "general use" to refer to the rate that serves most residential customers.

1 **III. RESIDENTIAL RATE DESIGN CONSIDERATIONS**

2 **Q. What are some of the principles involved in evaluating rate designs?**

3 A. There are many factors to consider when evaluating rate design proposals. Some
4 of the chief considerations involve efficiency, affordability, gradualism, and relating
5 rates charged to the costs incurred by their causers (“cost-causation”).

6 **Q. What are the typical components of a residential electric utility bill?**

7 A. Currently, Missouri residential customers of investor-owned electric utilities are
8 charged through two components. The first is a “customer charge,” a fixed monthly
9 amount that represents the costs incurred for connecting an individual customer to
10 the utility’s system irrespective of usage. The second component is a series of
11 “energy charges” which vary by season and amount of energy used. Other classes
12 may have a larger number of (or different) billing components based on factors
13 such as demand and reactive power needs.

14 **Q. How do general rate design considerations affect the determination of**
15 **customer charges?**

16 A. Customer charges customarily represent the costs for a utility to serve an
17 additional customer regardless of usage. Since it is a fixed amount, the customer
18 charge cannot be avoided by customers absent disconnection from a utility’s
19 system. Consequently, customer charges do not encourage efficient usage and
20 have disproportionate impacts on low-use customers and low-income customers
21 as a group.

1 **Q. In what ways do general rate design considerations factor into determining**
2 **energy charges?**

3 A. Traditionally, residential customers in Missouri have paid “declining block” energy
4 charges in the winter – i.e., they have paid less per amount of energy used after a
5 certain threshold or thresholds of usage. In the summer, these customers may
6 have paid a “flat” rate, or the same charge per amount of energy used for all
7 amounts of usage. As discussed below, KCP&L’s residential general use
8 customers are served under “inclining block” rates during the summer.

9 **Q. What price signals do customers receive from declining block rates?**

10 A. A declining block rate sends inappropriate efficiency signals to customers, since
11 the effective price signal of a declining block rate is that higher amounts of usage
12 cost less; the more energy the customer uses, the less they pay per unit of energy.
13 Customer bills based on declining block rates move energy efficiency away from
14 the forefront of customer awareness because their bills do not “connect” to their
15 higher consumption. Flat rates provide slightly better price signals than declining
16 block rates.

17 **Q. Why are inclining block rates more successful in encouraging energy**
18 **efficiency?**

19 A. Inclining block rates, which charge more per amount of energy used after a certain
20 threshold or thresholds of usage, serve to connect the customer and their electric
21 bills with increased usage. Such a “customer bill and usage connection” better
22 serves to inform the customer that to lower their bills, they must lower their usage.
23 Inclining block rates signal to customers that higher use incurs higher costs,

1 encouraging greater energy efficiency. The best efficiency-inducing price signals
2 are provided by inclining block rates.

3 **Q. Are there cost-based justifications for inclining block rates?**

4 A. Yes. Some claim that a low customer charge necessitates the recovery of “fixed”
5 costs (in the accounting sense) through the first block of volumetric rates.
6 However, the long-run view of utility costs is that they are all variable – lower
7 demand results in lower plant investment.² The recovery of historic costs, while
8 important for utilities, should not “lock in” future utility spending decisions by
9 encouraging higher use and a subsequent need for greater investment in plant.
10 Inclining block rates can not only be used to recover short-run “fixed” costs, but
11 signal to customers that higher usage spurs greater investment in future plant; this
12 signal will reduce the magnitude of future rate increases and provide benefits to all
13 customers. Further, higher customer charges may have an adverse impact on low-
14 income and low-use customers. I explore this topic more fully below.

15 **Q. How has the Commission ruled on the issue of inclining block rates in the**
16 **context of KCP&L?**

17 A. In Case No. ER-2016-0285, the Commission stated in its Report and Order:

18 A declining block rate sends poorer efficiency signals to customers, since
19 the effective price signal is that higher amounts of usage cost less.

20 Flat rates provide slightly better price signals, but the best efficiency-
21 inducing price signals, sponsored by DE, are provided by inclining block

² Lazar, Jim, et al. 2016. *Electricity Regulation in the US: A Guide*. 2nd ed. Montpelier, VT: The Regulatory Assistance Project. <http://www.raponline.org/wp-content/uploads/2016/07/rap-lazar-electricity-regulation-US-june-2016.pdf>. Pages 185-186.

1 rates ("IBR") (which charge more per amount of energy used after a certain
2 threshold or thresholds of usage).

3 Inclining block rates signal to customers that higher use incurs higher costs,
4 encouraging greater energy efficiency.

5 Inclining block rates can not only be used to recover short-run "fixed" costs,
6 but signal to customers that higher usage spurs greater investment in future
7 plant; this signal will reduce future rate increases and provide benefits to all
8 customers.

9 ...

10 An inclining block structure would also effectuate the public policy of the
11 state as enacted in the Missouri Energy Efficiency Investment Act. The IBR
12 would do so by incenting energy efficiency and demand response due to
13 the second block of energy being more expensive than the first block during
14 the summer.

15 Such energy savings and peak demand reduction reduces costs to the
16 utility, and, ultimately, also to its customers. (Citations omitted.)³

17 The Commission ultimately ordered the rate structure recommended by DE in that
18 case, which moved residential general use customers' winter volumetric rates
19 towards a flatter rate design and created an inclining block rate in the summer for
20 these same customers.⁴

³ Missouri Public Service Commission Case No. ER-2016-0285, *In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Report and Order, May 3, 2017, pages 53-54 and 55.

⁴ *Ibid*, page 57.

1 **Q. How do different volumetric rate designs affect low-use, low-income, and**
2 **electric space heating and/or cooling customers?**

3 A. The effects of volumetric rate designs on low-use and low-income customers
4 depend on the specifics of the rates. Generally, however, low-use and low-income
5 customers would fare the worst under declining block rate designs, since –
6 compared to service under other rate designs – they would be paying more per
7 unit of energy than high-use customers (and, consequently, paying
8 disproportionately more for short-run “fixed” costs than high-use customers). By
9 contrast, electric space heating and cooling customers – who generally use more
10 electricity than customers with other energy sources for space heating and cooling,
11 such as natural gas – benefit from traditional declining block rates. Based on these
12 considerations, an appropriately designed inclining block rate would set the first,
13 lowest block such that it charged for the most basic amounts of usage (e.g., some
14 space heating and cooling, cooking, and lighting). Determining what constitutes
15 “basic” usage takes careful research and assessment, and separate rates may
16 need to be designed for space heating (and potentially for space cooling for
17 vulnerable households).

1 **Q. You have addressed low-use and low-income customers together several**
2 **times. Is there evidence that low-income customers tend to use less**
3 **electricity?**

4 A. Yes. Regional data show that, on average, low-income households in the Midwest
5 generally use less electricity than non-low-income households.⁵ This conclusion is
6 understandable for a number of reasons, which could generally include the fact
7 that relative total energy use is lower in smaller houses and apartments and that
8 customers may undertake conservation measures through thermostat control or
9 eliminating usage in various rooms. Low-income customers may face particular
10 pressure to conserve energy because of financial difficulties that force a choice
11 between electricity, rent, medicine, food, and/ or other necessities.

12 The same data show that customers receiving assistance through the Low Income
13 Home Energy Assistance Program (“LIHEAP”) use more electricity than the
14 general low-income population,⁶ which is a logical outcome of receiving a bill
15 credit. The Commission acknowledged that low-income customers tend to use less
16 electricity in its Report and Order in Case No. ER-2016-0285.^{7, 8}

⁵ U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance. 2016. *LIHEAP Home Energy Notebook For Fiscal Year 2014*. Appendix A. Table A-2, page 95, https://www.acf.hhs.gov/sites/default/files/ocs/hen_final_508_compliant_fy14.pdf.

⁶ *Ibid.*

⁷ ER-2016-0285, Report and Order, page 55.

⁸ For additional discussion of the relationship between income and electricity usage, please see the Direct Testimony of DE witness Ms. Sharlet E. Kroll filed in the current rate cases.

1 **Q. Is there an inconsistency in promoting flat or inclining block rates and time-**
2 **differentiated (or “demand response”) rates?**

3 A. No, there is not necessarily a conflict between the consideration of demand
4 response rates and non-time-differentiated rate designs. The latter encourage
5 shifting usage to off-peak periods, while the former can support more efficient
6 usage overall. Demand response rates seek to shift usage away from peak usage
7 periods by reducing the relative rates charged during off-peak usage periods. Flat
8 or inclining block rates can be seen as important for generally increasing efficiency-
9 inducing price signals absent time-varying rates by signaling that higher usage
10 incurs higher system costs. Unless and until all residential customers are served
11 on time-varying rates, flat or inclining volumetric rates can encourage efficient
12 consumption by residential customers more generally. DE will respond to the
13 Companies’ time-differentiated rate proposals in Rebuttal Testimony.

14 **Q. What do you mean when you reference “gradualism?”**

15 A. “Gradualism” refers to the concept that rates should not change suddenly, and
16 introducing rates gradually minimizes extraordinary bill impacts. This is closely
17 related to the avoidance of “rate shock.”

18 **Q. Please summarize your discussion of rate design.**

19 A. Rates should be set in a manner that induces efficiency, ensures affordability,
20 maintains gradualism, and reflects cost-causation. This is best accomplished
21 through low monthly customer charges that only recover the costs to serve
22 individual customers irrespective of usage, coupled with a flat or inclining
23 volumetric rate that accounts for basic customer usage.

1 **IV. RESIDENTIAL BLOCK RATE DESIGN PROPOSALS**

2 **Q. Have the Companies proposed a continuation of their current residential**
3 **general use rate designs?**

4 A. Generally, yes. As shown below, residential customers would incur both a fixed
5 monthly customer charge and pay declining block rates in the winter; however, it
6 should be noted that GMO's proposal would effectively create a third winter block
7 rate that would decline slightly from the second block rate. KCP&L customers
8 would continue to pay under inclining block rates in the summer as they currently
9 do, while GMO customers would pay a flat rate in the summer. Customer charges
10 would also increase for residential customers under the Companies' rate design
11 proposals. DE will respond to the Companies' residential general use customer
12 and volumetric charge proposals in Rebuttal Testimony.

13 **Q. What are the Companies' proposals for residential general use rates?**

14 A. KCP&L's and GMO's proposals are shown below in Tables 1 and 2, respectively,
15 along with comparisons to the Companies' current rates.

1 **Table 1. KCP&L’s current and proposed residential general use rates.⁹**

| | | | Current | Proposed | Change |
|-----------------------------|--------|----------------|-----------|-----------|--------|
| Customer Charge | | | \$12.62 | \$15.17 | 20.21% |
| Volumetric Charge (per kWh) | Summer | First 600 kWh | \$0.12893 | \$0.13044 | 1.17% |
| | | Above 600 kWh | \$0.14916 | \$0.15090 | 1.17% |
| | Winter | First 600 kWh | \$0.12231 | \$0.12374 | 1.17% |
| | | Next 400 kWh | \$0.07396 | \$0.07483 | 1.18% |
| | | Above 1000 kWh | \$0.06561 | \$0.06638 | 1.17% |

2 **Table 2. GMO’s current and proposed residential general use rates.¹⁰**

| | | | Current | Proposed | Change |
|-----------------------------|------------------|----------------|-----------|-----------|--------|
| Customer Charge | | | \$10.43 | \$14.50 | 39.02% |
| Volumetric Charge (per kWh) | Summer (all kWh) | | \$0.12050 | \$0.12089 | 0.32% |
| | Winter | First 600 kWh | \$0.10625 | \$0.10660 | 0.33% |
| | | Next 400 kWh | \$0.07800 | \$0.07826 | 0.33% |
| | | Above 1000 kWh | \$0.07800 | \$0.07825 | 0.32% |

3 **Q. Does DE have recommendations for residential general use volumetric rates**
 4 **that support efficiency?**

5 A. Yes. As a step toward rates that send improved price signals for efficiency, DE
 6 recommends that the Companies move further towards the adoption of flatter
 7 volumetric rates for residential general use customers during the winter, and that
 8 GMO implement an inclining block rate for residential general use customers
 9 during the summer. DE also recommends that the Commission set a goal of

⁹ Missouri Public Service Commission Tariff No. YE-2017-0235, Kansas City Power & Light Company, Schedule of Rates for Electricity, June 8, 2017, Sheet No. 5A.
 Missouri Public Service Commission Case No. ER-2018-0145, *In the Matter of Kansas City Power & Light Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Minimum Filing Requirements for Utility Company General Rate Increases, Appendix 1 – Proposed Tariff Sheets, January 30, 2018, Sheet No. 5A.

¹⁰ Missouri Public Service Commission Tariff No. YE-2017-0068, KCP&L Greater Missouri Operations Company, Schedule of Rates for Electricity, February 22, 2017, Sheet No. 146.1.
 Missouri Public Service Commission Case No. ER-2018-0146, *In the Matter of KCP&L Greater Missouri Operations Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Minimum Filing Requirements for Utility Company General Rate Increases, Appendix 1 – Proposed Tariff Sheets, January 30, 2018, Sheet No. 146.1.

1 moving towards completely flat (i.e., no different charges for different usage
2 blocks) and/or inclining block rates for residential general use customers during
3 the winter in subsequent cases, ideally on an incremental basis. All such rate
4 design movement should be predicated on analyses of customer bill impacts.

5 **Q. Why not immediately transition to inclining winter block rates for residential**
6 **general use customers?**

7 A. First, as noted above, rate design should follow the principle of gradualism,
8 avoiding sudden changes to rate designs. Gradualism mitigates the level of “rate
9 shock” experienced by customers. Second, an inclining block rate design requires
10 careful analysis in order to identify typical basic customer usage, determine the
11 number of blocks in the rate, evaluate bill impacts, avoid adverse impacts to low-
12 income and low-use customers, allocate costs based on cost causation, and
13 ensure that the utility has a reasonable prospect of meeting its revenue
14 requirement. Movement away from declining block rates and towards flat
15 volumetric rates in the winter provides for a more gradual transition.

16 **Q. How might an inclining summer block rate be structured?**

17 A. As noted above, a summer inclining block rate should be structured such that the
18 initial block of usage encompasses basic customer end-uses, such as space
19 heating, cooling, and cooking. This approach can not only support revenue
20 neutrality (i.e., have a neutral impact on the utility’s revenues), but improve bill
21 affordability for low-use and low-income customers. The second and/or third blocks
22 should be designed to send an efficiency-inducing price signal without creating
23 unduly adverse bill impacts on the highest use customers. For example, rates

1 could be designed such that, on a revenue-neutral basis, customers at the 95th
2 percentile of bill impacts do not experience single-month bill impacts of greater
3 than five percent; this methodology is consistent with prior testimony filed by DE,
4 excludes unusually high bill impacts, and accounts for the fact that summer usage
5 is relatively flexible.¹¹ To the extent that current block cut-offs meet such
6 requirements, their continued use could improve customer understanding and rate
7 stability.

8 **Q. If customers respond to these revised rate structures by reducing usage, will**
9 **the Companies need to revise billing unit estimates to factor in this reduced**
10 **usage in establishing rates?**

11 A. Yes, potentially. In economics, the concept of “price elasticity of demand” refers to
12 customers’ consumption changes based on different prices. Estimates of the price
13 elasticity of demand for electricity vary, and the price elasticity of demand can
14 change over different time frames. For example, in 2013, The Brattle Group used
15 elasticities of -0.130 and -0.260 (i.e., 0.130 and 0.260 percent declines in
16 consumption for a one percent price increase) when evaluating an inclining block
17 rate for Union Electric Company d/b/a Ameren Missouri.¹² It is my understanding
18 that the Companies’ most recent triennial Integrated Resource Plans incorporated

¹¹ Missouri Public Service Commission Case No. ER-2016-0285, *In the Matter of Kansas City Power & Light Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Direct Testimony of Martin R. Hyman on Behalf of Missouri Department of Economic Development – Division of Energy, December 14, 2016, page 21, lines 10-18.

¹² Faruqui, Ahmad, and Hledik, Ryan. 2013. “The Potential Impact of Demand-Side Rates for Ameren Missouri: Final Report.” The Brattle Group. Slide 23.

1 elasticities.¹³ The Companies would need to use reasonable estimates of the price
2 elasticity of demand for residential customers to adjust the residential general use
3 rates such that they collect revenues at a level of consumption reflecting changes
4 in demand. However, if the new rates are expected to result in relatively small
5 variations in revenues, then an elasticity-based adjustment may not be needed.

6 **Q. Can revenue-neutral adjustments be made to the Companies' rates**
7 **regardless of the particular revenue requirement approved?**

8 A. Yes. Revenue-neutral adjustments maintain the Companies' present revenues
9 absent any accompanying changes in customer behavior. These adjustments can
10 be made either before or after the inclusion of revenue requirement-based
11 changes in customer rates. Nonetheless, DE recommends that the Commission
12 base its decision on bill impact analyses that incorporate both the potential
13 revenue-neutral changes in rate designs and any possible changes in revenue
14 requirements in order to gain a fuller understanding of overall impacts to
15 customers.

¹³ Missouri Public Service Commission Case No. EO-2018-0268, *In the Matter of Kansas City Power & Light Company's 2018 Triennial Compliance Filing Pursuant to 4 CSR 240 – Chapter 22*, Volume 5 – Demand-Side Resource Analysis, April 2, 2018, Page 43.
Missouri Public Service Commission Case No. EO-2018-0269, *In the Matter of KCP&L Greater Missouri Operations Company's 2018 Triennial Compliance Filing Pursuant to 4 CSR 240 – Chapter 22*, Volume 5 – Demand-Side Resource Analysis, April 2, 2018, Page 43.

1 **Q. Why modify the Companies' current rate designs when advanced metering**
2 **infrastructure will enable time-varying rate designs?**

3 A. The Companies' proposed time-varying rate designs are only pilot program
4 proposals.¹⁴ Since only a small number of customers will be able to voluntarily
5 participate in the pilot programs, other residential customers should still be served
6 under rate designs that encourage efficient use.

7 DE anticipates that, in the future, most residential general use customers will be
8 served on demand response rates. These rates can support shifting consumption
9 towards off-peak periods. However, the Companies' proposed pilot time-of-use
10 rates are generally a reasonable transition step that will allow the Commission to
11 learn more about the implementation of demand response rates. An immediate
12 switch to time-of-use rates for all customers would violate the principle of
13 gradualism and would not be feasible where sufficient metering and billing
14 infrastructure does not yet exist. Time-differentiated rate implementation should
15 also be coupled with extensive customer education.

16 **Q. Will customer education be important during the transition to flat or inclining**
17 **block rates?**

18 A. Yes. Absent customer awareness of the rate designs under which they are served,
19 price signals will not be as obvious to customers and there will be less movement
20 on their parts towards efficiency. The Companies must educate customers about

¹⁴ ER-2018-0145, Minimum Filing Requirements for Utility Company General Rate Increases, Appendix 1 – Proposed Tariff Sheets, Sheet No. 7; ER-2018-0146, Minimum Filing Requirements for Utility Company General Rate Increases, Appendix 1 – Proposed Tariff Sheets, Sheet No. 146.5.

1 changes in rate designs and about measures to mitigate bill impacts, such as
2 energy efficiency programs.

3 **Q. Could inclining block rates create a disincentive for residential customers to**
4 **use EVs?**

5 A. To the extent that residential customers' energy usage for EV charging reaches
6 past the first tier of an inclining block rate design during the summer, such
7 customers would pay more under inclining block rates. This concern could be
8 mitigated if the Companies work to identify EV drivers and inform them of the option
9 to switch to time-of-use rates, which – if properly structured – could provide EV
10 drivers with cost savings in exchange for charging during “off-peak” times of overall
11 system load. This would benefit both the EV-owning customers and the utility
12 system by moving EV charging away from on-peak hours in order to mitigate
13 increases to system peak load and to fill in time periods of lower system utilization,
14 thereby reducing costs associated with peak demand and underutilized
15 infrastructure.

16 **Q. What steps might the Companies take to identify its customers who are EV**
17 **drivers?**

18 A. The Companies might consider every way that they presently seek information
19 from and educate their customers. Some considerations might be: working through
20 local EV dealerships to inform KCP&L and GMO customers of time-of-use-rates;
21 potential identification of EV customers through the Companies' call center when
22 customers call in and via automated outbound calling; and, via information

1 provided on the Companies' website, through social media campaigns, in bill
2 inserts, and in public notices (such as through local newspapers).

3 **Q. The Companies have proposed caps on participation in their time-of-use rate**
4 **pilots.¹⁵ How does DE's proposal regarding EV drivers fit into the**
5 **Companies' proposed caps?**

6 A. Although DE will respond to the Companies' time-of-use rate proposals in Rebuttal
7 Testimony, DE recommends in this testimony that the Companies expand or
8 eliminate their proposed participation caps in order to accommodate additional
9 participants with EVs and allow for other interested customers to participate in the
10 pilots. Expanded participation by non-EV-owning customers will also support more
11 robust pilot results by avoiding "oversampling" customers with EVs.

12 **Q. Is DE proposing any revisions to rates for Small General Service ("SGS")**
13 **customers?**

14 A. Not at this time. SGS customers are billed under a different tariff structure than
15 residential customers, so different analyses would be required to determine
16 appropriate rate designs. DE recommends that the Commission order the
17 consideration of new rate designs for SGS customers in the Companies' next
18 general rate cases.

¹⁵ *Ibid.*

1 **V. CONCLUSIONS**

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

3 A. DE supports continued movement towards flatter residential winter general use
4 rates, as well as the implementation of an inclining block rate structure in the
5 summer for GMO's residential general use customers. These rate designs, which
6 should be based on bill impact analyses, will better encourage customers to
7 undertake efficiency actions. In conjunction with these rate design changes, DE
8 also recommends proactive outreach by the Companies to identify EV users who
9 may benefit from time-of-use rates. Additionally, DE recommends customer
10 education for the residential general use classes more broadly regarding rate
11 designs and energy efficiency.

12 **Q. Does this conclude your Direct Testimony?**

13 A. Yes.