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SURREBUTTAL TESTIMONY
OF
LAURA WOLFE
MISSOURI DEPARTMENT OF NATURAL RESOURCES
ENERGY CENTER

April 7, 2009

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

KANSAS CITY POWER AND LIGHT ELECTRIC RATE CASE

CASE NO. ER-2009-0089

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

2 A. My name is Laura Wolfe.

3 **Q. Are you the same Laura Wolfe that filed Direct Testimony in this case?**

4 A. Yes, I am.

5 **Q. On whose behalf are you testifying?**

6 A. I am testifying on behalf of the Missouri Department of Natural Resources (DNR), an
7 intervenor in these proceedings.

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

9 A. The purpose of my testimony is to respond to the rebuttal testimony filed by Mr. Ryan Kind
10 of the Office of Public Counsel (“OPC”) regarding the Supplemental Weatherization and
11 Minor Home Repair Program introduced by Kansas City Power and Light (“KCPL”) witness
12 Mr. Allen D. Dennis, and to respond to Mr. Dennis’ rebuttal testimony regarding my
13 proposed energy efficiency target.

14 **Q. Does Mr. Kind support the Supplemental Weatherization and Minor Home Repair
15 Program proposed by KCPL?**

16 A. No. On page 4 of Mr. Kind’s rebuttal testimony he states two reasons why OPC opposes this
17 program. First, he states that there is insufficient detail regarding the program, and the
18 second is belief that “additional **utility** funding of low income weatherization programs is
19 not needed at the same time that we have experienced an enormous increase in **federal**
20 weatherization funding due to passage of the federal economic stimulus program.”

21 **Q. Do you agree with Mr. Kind’s statement that there is insufficient detail regarding the
22 program?**

1 A. No. I agree that the program details are not included in this case, but I do not believe that is
2 necessary in order for the Commission to rule on its implementation. There is an expressed
3 need for this program, as detailed in my Direct Testimony. The tariff sheet(s) can be
4 submitted when KCPL has formulated the details of the program, and OPC can take full
5 advantage of its right to file for a request for suspension of that tariff.

6 **Q. Do you agree with Mr. Kind’s belief that this program should be denied because of**
7 **anticipated additional federal funds?**

8 A. Not at all. As noted in my direct testimony, the Department of Energy (“DOE”), the Federal
9 agency that administers the Low Income Weatherization Program (“LIWAP”), established a
10 deferral standard for homes where the “...building structure or its mechanical systems,
11 including electrical and plumbing, are in such a state of disrepair that failure is imminent
12 and the conditions cannot be resolved cost effectively.” The DOE further stated that the
13 decision to defer work in a dwelling is difficult but necessary in some cases. This does not
14 mean that assistance will never be available, but that work must be postponed until the
15 problems can be resolved and/or alternative sources of help are found. This deferral standard
16 will still apply when Missouri receives LIWAP funds as a result of the American Recovery
17 and Reinvestment Act of 2009. Mr. Kind’s objection to this program based on the
18 anticipated ARRA funding is without merit.

19 **Q. What was Mr. Dennis’ response to your recommendation to implement an energy**
20 **efficiency target for future IRP analysis?**

21 A. Mr. Dennis took exception to my recommendation to establish an energy efficiency target in
22 this rate case because KCP&L's IRP energy efficiency target was too low. He asserts that
23 the data I cited from KCP&L’s IRP filing, i.e., “KCP&L’s analysis produced projected

1 incremental and cumulative load savings for DSM programs for the years 2010 to 2025 of no
2 more than 0.58 percent annually, and cumulatively a load savings of no more than 2.67
3 percent over the course of the fifteen years”, represents load savings net of free ridership,
4 while the Iowa energy savings targets that I referenced in my direct testimony are gross
5 energy savings. Mr. Dennis states that KCPL’s projected gross energy savings for the years
6 2011 through 2013 are reflected on Chart 1: KCP&L Gross DSM Savings as a Percent of
7 Billed Total Sales from KCP&L’s integrated resource plan.

8 **Q. Do you agree with Mr. Dennis’ statement that the Iowa energy savings targets are gross**
9 **energy savings targets and, therefore, should not be compared to KCP&L's targets?**

10 A. No. To truly net energy savings, the gross energy savings must be adjusted by two different
11 components: free-ridership and spill-over. Free-ridership assumes a certain number of
12 customers had been planning to install energy saving measures and would have done so
13 without the utility incentive but took advantage of it since it was available. The other
14 component, spill-over, is the amount of savings the DSM programs achieve without a direct
15 cost. In other words, it assumes that some customers implemented energy saving measures
16 and did not know about the utility program or failed to apply for an incentive for example.
17 Both components are necessary to establish a net-to-gross ratio.

18 Mr. Dennis states that “Iowa’s energy savings targets are gross energy savings and are not
19 discounted for free ridership.” That is not entirely accurate. The Iowa Utilities Association
20 Joint Assessment Study devotes an entire appendix in the recently released “An Assessment
21 of the Net-to-Gross Ratio Issue.”¹ This document provides an excellent overview of the
22 theory and practice of net-to-gross ratios. The report offers these conclusions:

¹ Quantec Energy Economics. "Assessment of Energy and Capacity Savings Potential in Iowa - Vol II," Portland., OR.. February 2008. Appendix G.

- 1 • “Net-to-gross estimates would have minor, if any, impacts on the societal
- 2 benefit test.”
- 3 • “Many states have assumed free ridership and spillover offset one another.”
- 4 • “Estimating free ridership and spillover is difficult, with no consensus on an
- 5 approach for how best to estimate these values”
- 6 • “A study of best practice programs found over two-thirds of all identified
- 7 programs had a net-to-gross value of approximately 1.0.”
- 8 • “Assuming a net-to-gross ratio of 1.0 may provide conservative estimates.”
- 9

10 Iowa engaged in a concerted effort to determine the appropriate method of netting gross
11 energy savings of free ridership and spillover, and determined to assume for the time being
12 that free ridership is equally offset by spillover. So while Iowa is, for now, using an
13 assumption that net savings and gross savings are equal, it is based on an analysis of both
14 free ridership and spill over.

15 **Q. Did Mr. Dennis address any of the other example state DSM energy savings targets**
16 **presented in your direct testimony?**

17 A. No.

18 **Q. Do any of the other example state DSM energy savings targets presented in your direct**
19 **testimony net free riders and spill over?**

20 A. Yes. Some of the other example states that I cited in my direct testimony use a net energy
21 savings target without assuming as Iowa did that free ridership is equally offset by spillover.
22 For example, the New York Public Service Commission adopted the goal of 15% electricity
23 usage reduction statewide by 2015.² Given that this order was effective in 2008, that’s a
24 reduction of 15% over six years. The New York Public Service Commission then established
25 a standard approach for estimating energy savings from energy efficiency programs.³ The
26 issue of net to gross adjustments was addressed and the finding was that “for the purposes of

² Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard*, Order Establishing Energy Efficiency Portfolio Standard and Approving Programs, Issued and Effective June 23, 2008

1 estimating program impacts, the savings estimates presented in this manual, or the savings
 2 produced using the calculation approaches described in this manual, must be multiplied by
 3 0.90 to arrive at an estimated net energy savings for each measure.”

4 Vermont’s energy efficiency delivery system, *Efficiency Vermont*, uses a technical reference
 5 manual. In that manual, free ridership and spill over factors for each measure are detailed.

6 The table below is an excerpt from the current version of the manual.⁴

Measure Category		Motor	
Measure Code		MTRDP001, et. al.	
Product Description		Efficient Motor	
Track Name	Track No.	Freerider	Spillover
Act250 NC	6014A250	0.95	1
Cust Equip Rpl	6013CUST	0.89	0.70
Non Act 250 NC	6014NANC	1	1
Pres Equip Rpl	6013PRES	0.90	0.70
C&I Retro	6012CNIR	0.89	0.70

8

9 **Q. Does the information in Chart 1 resolve the issue of KCP&L’s level of DSM energy**
 10 **savings as compared to other states?**

11 A. No. The energy savings levels that I originally cited from KCP&L’s IRP are, according to
 12 Mr. Dennis, energy savings netted by only free ridership. As demonstrated above, two
 13 components are required to properly net gross energy savings: free ridership and spill over.
 14 In an apparent attempt to make an apples-to-apples comparison, Mr. Dennis refers to Chart
 15 1: KCP&L Gross DSM Savings as a Percent of Billed Total Sales from KCP&L’s integrated
 16 resource plan, and states that “KCP&L’s gross energy savings are projected to be 1.44
 17 percent by 2011, 2.18 percent by 2012, and 2.81 percent by 2013.” However, these
 18 projected amounts are *cumulative* energy savings. The *annual*, i.e. *incremental*, energy

³ http://www.dps.state.ny.us/NY_Standard_Approach_for_Estimating_Energy_Savings_12-08.pdf

1 savings for each of those years are only .75% for 2010, .74% for 2011, .77% for 2012, .66%
2 for 2013, and .68% for 2014. These are far less than the examples I cited in my direct
3 testimony:

- 4 • Illinois 10% reduction by 2017 and ramp up to 2%/yr incremental
- 5 • Iowa 1.5% of annual retail sales by 2011
- 6 • Maryland 15% by 2015 (more than 1% per year on average)
- 7 • Michigan 1% annually of total sales by 2012
- 8 • New Jersey Reduce 20% (more than 1% per year on average)
- 9 • New York 1.9% per year

10
11 **Q. Do you continue to recommend the Commission implement an energy efficiency target**
12 **for future KCP&L IRP analysis?**

13 Yes. MDNR recommends that the Commission establish the following DSM target for
14 KCPL: a net incremental reduction in annual energy usage of at least one percent (1%)
15 resulting from the ongoing implementation of demand side programs and that this annual
16 incremental goal be continued over a 20-year planning period. The calculation of net
17 incremental reduction in energy usage should incorporate free-ridership and spill-over
18 factors. This DSM goal should be used by KCPL in its resource planning analysis.

19 **Q. Do you agree with Mr. Dennis that because KCPL has already established DSM targets**
20 **in its IRP, this is sufficient reason for the Commission not to establish a DSM target for**
21 **KCPL in this rate case?**

22 A. No. I believe the Commission should take every opportunity to clearly establish its
23 expectations for a thorough analysis of demand side management options. The
24 Commission's Electric Utility Resource Planning rule (4 CSR 240-22) does not establish any
25 targets for reductions in energy use from DSM. While KCPL may have internally

⁴ Efficiency Vermont Technical Reference User Manual (TRM) No 2009-54

1 established targets it used in preparation of its resource plan, it can just as easily abandon
2 those targets. The Commission may concur with the MDNR's position and determine that
3 the targets established by KCPL are too low. It is appropriate for the Commission to
4 establish targets for energy efficiency savings, and the Commission has done so in a previous
5 rate case.⁵ Demand-side management targets will provide guidance to KCPL regarding the
6 aggressiveness and thoroughness of pursuing demand-side resource management measures.

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

8 A. Yes.

⁵ In the Matter of Union Electric Company d/b/a AmerenUE's Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.