

Exhibit No.:
 Issues: Low-Income Weatherization
 Witness: Sharlet E. Kroll
 Sponsoring Party: Missouri Department of Economic
 Development – Division of Energy
 Type of Exhibit: Surrebuttal Testimony
 Case Nos.: ER-2016-0023

FILED
 August 11, 2016
 Data Center
 Missouri Public
 Service Commission

MISSOURI PUBLIC SERVICE COMMISSION

EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. ER-2016-0023

SURREBUTTAL TESTIMONY

OF

SHARLET E. KROLL

ON

BEHALF OF

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT

DIVISION OF ENERGY

Jefferson City, Missouri

May 16, 2016

(Low-Income Weatherization)

DE Exhibit No. 5
 Date 6-02-16 Reporter KF
 File No. ER-2016-0023

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1 **I. INTRODUCTION**

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

3 A. My name is Sharlet E. Kroll. My business address is 301 West High Street, Suite 720, PO
4 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 (“DED”) –
7 Division of Energy (“DE”) as a Planner II Energy Policy Analyst.

8 **Q. Have you previously filed testimony before the Missouri Public Service Commission
9 (“Commission”) in this case (ER-2016-0023)?**

10 A. Yes. I submitted Rebuttal Testimony (Low-Income Weatherization and Low-Income
11 Characteristics) on behalf of DE regarding The Empire District Company’s (“Empire” or
12 “Company”) weatherization program.

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

14 **Q. What is the purpose of your Surrebuttal Testimony in this proceeding?**

15 A. The purpose of my Surrebuttal Testimony is to respond to the Company’s claims that an
16 increase in the customer charge will reduce usage by low-income customers who receive
17 governmental assistance to pay their utility bills. I will also offer additional clarification
18 as to the Company’s weatherization program.

1 **III. RESPONSE TO COMPANY'S STATEMENTS REGARDING HIGH USE, LOW-**
2 **INCOME CUSTOMERS**

3 **Q. In his Rebuttal Testimony, Mr. Keith claims that "...Empire's customers using**
4 **government assistance to pay their electric bills would benefit from an upward shift**
5 **in the customer charge,..."¹. Do increased customer charges have a different**
6 **impact on Low-Income Home Energy Assistance Program ("LIHEAP") recipients**
7 **than the broader base of low-income customers?**

8 **A.** Yes. As I stated in Rebuttal Testimony, LIHEAP is a subsidy for utility bill assistance
9 and not an energy efficiency measure to reduce consumption. LIHEAP is one strategy
10 designed to reduce the energy burden of low-income families and potentially buffer them
11 from the effects of energy insecurity by subsidizing their utility bill. DE agrees with
12 statements by Office of Public Counsel ("OPC") witness, Dr. Geoff Marke, that LIHEAP
13 encourages energy consumption.² Energy is a basic need. For individuals with chronic
14 medical conditions, energy is a necessity to refrigerate medications, run medical
15 equipment, or provide the heating or cooling temperature needed for health and comfort.³
16 Energy insecurity occurs when one or all of the following are experienced:⁴ 1) limited or
17 uncertain access to energy, 2) receipt of utility termination notice, and 3) actual shut-off
18 of utility service. Families make trade-offs on which bills to pay such as rent, or they
19 forgo purchases like food, medical care, or medications. Families, who experience

¹ Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Rebuttal Testimony of W. Scott Keith on Behalf of The Empire District Electric Company, April 2016, page 12, lines 17-18.

² Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service*, Rebuttal Testimony of Dr. Geoff Marke on Behalf of The Office of the Public Counsel, May 2, 2016, page 21, lines 4-8.

³ D. Hernandez, Y. Aratani, and Y. Jiang. *National Center for Children in Poverty*. Energy Insecurity Among Families with Children, January 2014.

⁴ E. March. *Children's HealthWatch*. Behind Closed Doors, The hidden health impacts of being behind on rent, January 2011.

1 energy insecurity, may also have experienced food insecurity or housing insecurity.
2 Children's HealthWatch, "*Behind Closed Doors*,"⁵ found that families, who are behind
3 on rent, experience the following more frequently: food and/or energy insecurity, receive
4 assistance through the Supplemental Nutrition Assistance Program and LIHEAP, make
5 trade-offs on household expenses in order to pay medical bills, have parents who have
6 forgone medical care for themselves or another family member, and have a mother with
7 symptoms of depression.

8 **Q. Is there evidence that low-income households as a group consume less electricity**
9 **than LIHEAP recipients?**

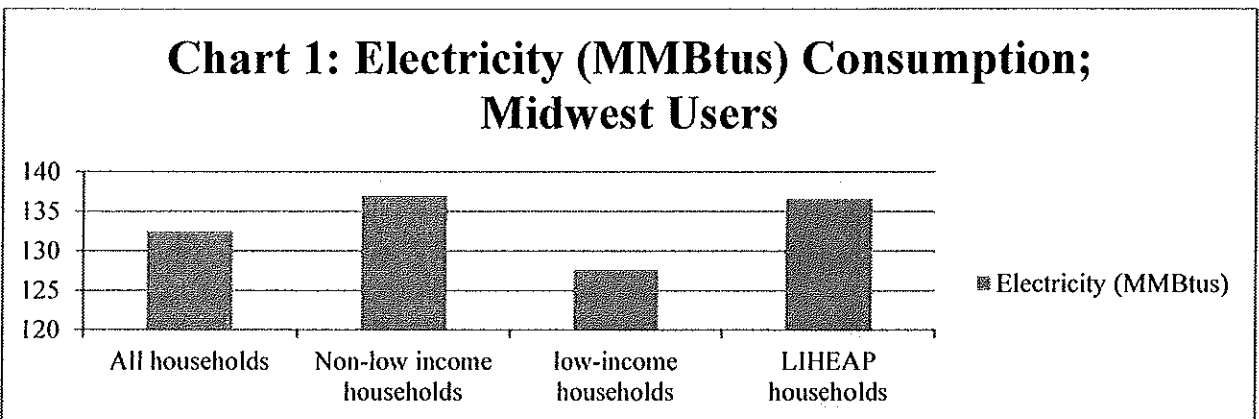
10 **A.** Yes. The LIHEAP Home Energy Notebook ("Notebook") for FY11 is the last
11 published version available. It includes national and regional data on four categories of
12 users: all households, non-low income households, low-income households, and
13 LIHEAP recipient households. Below is an abbreviated copy of Table A-2 from the
14 Notebook, which compares average consumption per household by end user and fuel
15 source. Midwest households across all categories consumed more electricity when
16 compared to all categories of US households.

⁵ Ibid.

Notebook Table A-2⁶: Residential energy: Average consumption in MMBtus per household, by all fuels and specified fuels, by all, non-low income, low income and LIHEAP recipient households, by Census region, FY 2011

Census Region	Natural Gas (MMBtus)	Electricity (MMBtus)	Fuel Oil (MMBtus)	Kerosene (MMBtus)	LPG (MMBtus)	Other (MMBtus)
US – All households	99.1	115.4	62.7	151.7	55.7	112.5
US – Non-low income households	105.3	120.1	67.6	160.9	62.1	120.0
US – Low income households	87.5	105.5	54.4	137.7	54.5	98.4
US – LIHEAP recipient households	107.3	117.9	50.5	155.6	78.3	112.0
Midwest – All households	120.2	132.5	61.3	131.6	92.2	131.1
Midwest – Non-low income households	126.0	137.0	67.5	139.2	NC	132.6
Midwest – Low income households	110.4	124.7	53.7	122.0	92.2	125.7
Midwest – LIHEAP recipient households	124.0	136.6	50.5	153.5	90.0	107.7

Chart 1: Electricity (MMBtus) Consumption; Midwest Users



1 Low-income households, in the Midwest, consumed less electricity than all Midwestern
 2 households combined – 124.7 MMBtus versus 132.5 MMBtus (Chart 1), while **non-low**
 3 income households consumed more electricity than all other users – 137.0. The
 4 electricity consumption of LIHEAP recipient households in the Midwest resembled that

⁶ U.S. Department of Health and Human Services Administration for Children and Families Office of Community Services Division of Energy Assistance. LIHEAP Home Energy Notebook For Fiscal Year 2011, June, 2014. Table A-2: LIHEAP defines low-income as those which are at or below 150 percent of the poverty guidelines and do not receive LIHEAP assistance.

1 of non-low income household consumption. Therefore, an increase in the customer
2 charge is not expected to reduce energy consumption. It will, however, decrease the
3 potential buffer effect LIHEAP offers in shielding vulnerable households from energy
4 insecurity.

5 **IV. CLARIFICATION OF COMPANY'S WEATHERIZATION PROGRAM.**

6 **Q. Is the DE-administered Low-Income Weatherization Program ("LIWAP") the same**
7 **as the Missouri Department of Social Services ("DSS")-administered LIHEAP?**

8 A. No. During her argument for an evaluation of the Company's weatherization program,
9 Missouri Public Service Commission Staff ("Staff") witness, Kory Boustead, states that:

10 ..."the number of Low Income Heating Energy Assistance Program ("LIHEAP")
11 applications has declined each year over the past four years. In other words the,
12 program that was evaluated in 2009 is quite different from the program today..."⁷

13 DE would like to clarify that LIHEAP funds used for heating assistance is neither part of
14 the Company's weatherization program nor LIWAP and thus cannot be used as
15 justification to support an evaluation of either program. DSS-administered LIHEAP is
16 comprised of two components: Energy Assistance/Regular Heating ("EA") and Energy
17 Crisis Intervention Program ("ECIP"). EA provides financial assistance to eligible
18 customers with their utility bills during the heating season. ECIP provides financial
19 assistance to eligible customers who have a verifiable energy crisis⁸. Missouri
20 recognized that LIHEAP was a short-term and not a long-term solution to energy
21 conservation. Therefore, starting with the FY15 budget, the Missouri legislature began
22 appropriating 10% or up to \$7M of LIHEAP funds from DSS to the DE-administered

⁷ Boustead, Rebuttal. Page 2, lines 14-16.

⁸ Missouri Department of Social Services. Low Income Home Energy Assistance Program. <http://dss.mo.gov/fsd/liheap.htm>

1 LIWAP,⁹ and these LIHEAP funds are one of four funding streams administered by DE.
2 Additionally, there is insufficient LIHEAP funding in relationship to need. While there
3 was a slight increase in LIHEAP funds for FY14, the trend has been an annual decrease
4 in funding – \$119M to \$71.6M – between FY10 to FY14.¹⁰ Eligibility, for LIHEAP
5 heating and crisis assistance in Missouri, is 135% or less of the federal poverty level
6 guidelines (“FPL”). A family of three at 135% FPL, with an average Empire utility bill
7 of \$142.01,¹¹ has a 6.3% energy burden under Empire’s current rates. As noted in my
8 rebuttal testimony, housing analysts consider energy burdens of 6% and greater to be
9 unaffordable.

10 **Q. Please clarify the per-home spending caps under US Department of Energy’s**
11 **(“DOE”) LIWAP and under Empire’s weatherization program.**

12 **A.** As Missouri Public Service Commission Staff (“Staff”) witness, Ms. Boustead stated in
13 Rebuttal Testimony, the US Department of Energy (“DOE”) changed the low-income
14 eligibility limit for LIWAP from 150% to 200% of the FPL and raised the average cost
15 per home limit from \$2,966 in FY09 to its current limit of \$7,105 average cost per home
16 as a result of the American Recovery and Reinvestment Act (“ARRA”). DE would like
17 to clarify that DOE did not reduce the average cost per home limit after ARRA funding
18 ceased. As I testified in my Rebuttal Testimony, Empire manages their weatherization
19 program through contracts with three Community Action Agencies (“CAAs”), who
20 administer the Company’s weatherization program. DE allows CAAs to use LIWAP

⁹ 98th General Assembly. Second Regular Session [Truly Agreed to and Finally Passed] Conference Committee Substitute for Senate Committee Substitute for House Committee Substitute for House Bill No. 2011 An Act. Section 11.160, page 10.

¹⁰ Heather Jones, presentation documents to Statewide Natural Gas Collaborative, December 2015.

¹¹ Missouri Public Service Commission Case No. ER-2016-0023, *In the Matter of The Empire District Electric Company’s Request for Authority to Implement a General Rate Increase for Electric Service*, Direct Testimony of Martin R. Hyman on Behalf of The Division of Energy, April 8, 2016, page 22, Table 4a.

1 funds to supplement the Company's weatherization funds when weatherizing a home.
2 While the Company's weatherization program follows LIWAP guidelines, their contracts
3 with the CAAs state:

4 "The estimated average reimbursement for equipment, labor and materials for
5 installation of eligible energy efficiency measures to be funded by EDE is \$1,800
6 per home. The maximum expenditure per home is outlined in Empire's Low-
7 Income Weatherization tariff sheet 8c, filed with the Missouri Public Service
8 Commission ("MPSC"), and this tariff is subject to change with the approval of
9 the MPSC."¹²

10 Tariff sheet 8c, which was provided to DE, with the Company's response to Data Request
11 406.1, does not list a "maximum expenditure per home" amount. It does, however, list a
12 "maximum expenditure per home" of **administrative costs**, which shall not exceed 15%
13 of the total expenditures for the home. DE recommends that either the CAA contracts or
14 tariff sheet 8c be updated for the purposes of clarity, consistency and transparency.

15 **Q. Does DE support OPC's position regarding an evaluation of the Company's**
16 **weatherization program?**

17 **A.** DE agrees with OPC witness Dr. Geoff Marke that a full evaluation of the cost-
18 effectiveness of Empire's weatherization program is not needed and is not a fiscally
19 prudent use of ratepayer funds. However, DE does see the need for an evaluation of
20 Empire's management and the CAA's administration of the Company's weatherization
21 program so that improvement opportunities can be noted and implemented with the goal
22 of moving towards full utilization of the Company's weatherization budget. The DE-

¹² Company Response to Division of Energy Data Request 406.1, part 1.

1 administered LIWAP already undergoes regular evaluations and therefore, need not be
2 included in any evaluation of the Company's weatherization program. Further, each
3 efficiency measure installed in a DE-administered LIWAP home must pass a cost-
4 effective analysis, which is based on a savings to investment ratio. As part of my training
5 with DE, I accompanied DE weatherization technical staff on monitoring visits to pre-
6 and post-weatherized homes. During one visit, I observed a combustion gas analysis on a
7 natural gas furnace. The combustion gas analysis is done to measure carbon monoxide
8 and steady state of efficiency, which is then used to perform the cost-test analysis. In this
9 particular home, the natural gas furnace failed to pass the cost-test analysis even though it
10 was approximately 30 years old. Therefore, an upgrade to an energy star furnace could
11 not be included in the weatherization measures being installed in the home.

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

13 **A.** Yes, thank you.