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Low Income Issues
Public Counsel
ER-2010-0130

SUPPLEMENTAL DIRECT TESTIMONY

OF

BARBARA A. MEISENHEIMER

Submitted on Behalf of
the Office of the Public Counsel

EMPIRE DISTRICT ELECTRIC COMPANY

Case No. ER-2010-0130

April 9, 2010

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

In the Matter of The Empire District Electric)
Company of Joplin, Missouri for Authority)
to File Tariffs Increasing Rates for Electric)
Service Provided to Customers in the Missouri)
Service Area of the Company.)

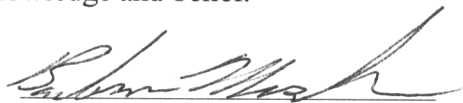
Case No. ER-2010-0130

AFFIDAVIT OF BARBARA A. MEISENHEIMER

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Barbara A. Meisenheimer, of lawful age and being first duly sworn, deposes and states:

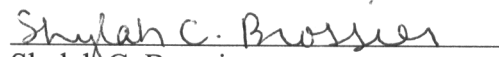
1. My name is Barbara A. Meisenheimer. I am a Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my supplemental direct testimony.
3. I hereby swear and affirm that my statements contained in the attached affidavit are true and correct to the best of my knowledge and belief.


Barbara A. Meisenheimer

Subscribed and sworn to me this 8th day of April 2010.



SHYLAH C. BROSSIER
My Commission Expires
June 8, 2013
Cole County
Commission #09812742


Shylah C. Brossier
Notary Public

My commission expires June 8th, 2013.

SUPPLEMENTAL DIRECT TESTIMONY
OF
BARBARA A. MEISENHEIMER
EMPIRE DISTRICT ELECTRIC COMPANY
(LOW-INCOME ISSUES)
CASE NO. ER-2010-0130

1 ***I. Introduction and Summary***

2 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

3 A. Barbara A. Meisenheimer, Chief Utility Economist, Office of the Public Counsel, P. O.
4 2230, Jefferson City, Missouri 65102.

5 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS CASE?**

6 A. Yes, I filed direct testimony on rate design on March 9, 2010.

7 **Q. WHAT EXPERIENCE DO YOU HAVE RELATED TO THE DESIGN OF LOW-INCOME**
8 **ASSISTANCE PROGRAMS?**

9 A. In the area of telecommunications I served on the Federal/State Universal Service Joint
10 Board Staff for a number of years. I reviewed information on the design and cost of state
11 and federal low-income programs and participated in preparing recommendations for the
12 FCC in implementing the Federal Lifeline and Link-Up programs. At the State level, I
13 participated in industry workshops to develop the low-income and disabled components
14 of the Missouri Universal Service Fund and have since its inception assisted the Public
15 Counsel in his duties as a member of the Missouri Universal Service Board.

1 On behalf of Public Counsel, I worked with the Department of the Census to
2 develop data designed to identify low-income household telephone subscribership
3 stratified by percentage of the federal poverty level in order to develop recommendations
4 to better target low-income support.

5 With respect to low-income programs for natural gas and electric utilities, I have
6 filed testimony on the design of experimental low-income programs for a number of
7 companies in the State, including Laclede Gas, MGE, Aquila Gas, Empire Electric,
8 AmerenUE and KCP&L. The scope of this testimony addressed low-income program
9 design including but not limited to bill discounts, arrearage repayment incentives and
10 low-income weatherization. I have reviewed census data and consumer expenditure data
11 compiled by EIA in the Department of Energy to evaluate low-income household
12 characteristics and natural gas and electric consumption compared to those of households
13 at higher income levels. I have also participated in workshops and collaborative group
14 meetings to implement and evaluate low-income programs.

15 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16 **A.** The purpose of my supplemental direct testimony is to present Public Counsel's position
17 on how low-income program issues should be addressed in this case and to respond to the
18 Commission's request to hear from the parties in this case about ideas for reducing the
19 financial burden on low-income residential customers while providing a fair and adequate
20 return to the Company. Specifically, the Commission indicated that in addition to the

1 mechanisms traditionally utilized to assist low income customers, the parties should
2 address the feasibility of establishing an experimental "very low-income" customer class
3 that would be based upon the federal poverty level.

4 **Q. PLEASE PROVIDE BACKGROUND ON EMPIRE DISTRICT ELECTRIC COMPANY'S LOW-**
5 **INCOME PROGRAM.**

6 A. The Company's Experimental Low-Income Program (ELIP) was originally implemented
7 as a result of Case No. ER-2002-0424. The program included a two-tiered bill credit
8 based on household income relative to the Federal Poverty Guidelines. In Case No. ER-
9 2006-0315, parties disagreed on whether the program should continue. The Commission
10 determined that the program should continue and directed modifications including longer
11 participation periods, increased bill credits, the addition of an arrears repayment
12 incentive, and targeted outreach. In Case No. ER-2008-0093, parties again disagreed on
13 whether the program should continue but ultimately entered a Stipulation and Agreement
14 to extend the existing program until the effect date of new rates in the Iatan 2 rate case as
15 specified in the Regulatory Plan Stipulation and Agreement in Case No. EO-2005-0263.

16 **Q. PLEASE SUMMARIZE PUBLIC COUNSEL'S POSITION ON ADDRESSING LOW-INCOME ISSUES**
17 **IN THIS CASE.**

18 A. Public Counsel was a signatory to the Stipulation and Agreement in ER-2008-0093 which
19 extended Empire's existing low-income program until the effective date of new rates in
20 the Iatan 2 rate case. Consistent with the Stipulation and Agreement, Public Counsel

1 supports continuation of Empire's existing low-income program without modification.
2 However, Public Counsel does wish to be responsive to the Commission's request for
3 information on low-income issues in this case.

4 **Q. WHAT ISSUES ARE ADDRESSED IN THE REMAINDER OF YOUR TESTIMONY?**

5 A. The remainder of this testimony addresses Public Counsel's position on the appropriate
6 goals for a low-income program, summarizes the types of programs undertaken in the
7 State to assist low-income customers and to address in the context of low income
8 program design, some of the specific issues raised by the Commission.

9 ***II. Low-Income Program Goals***

10 **Q. WHAT CONSIDERATIONS SHOULD BE BALANCED IN ADOPTING PROGRAMS TO ASSIST**
11 **LOW-INCOME AND WEATHERIZATION PROGRAMS?**

12 A. It is paramount to balance the need for low-income and energy efficiency programs with
13 the need to ensure that Missouri's utility consumers pay rates that are just and reasonable.

14 To the extent that ratepayers are called upon to fund low-income and energy efficiency
15 programs, the programs should be designed so that they can reasonably be expected to
16 balance the interests of those who receive support with the interests of those who provide
17 it. Ratepayer funding for programs that cannot reasonably be expected promote both
18 interests should not be imposed through the ratemaking process unless there is a specific
19 legislative mandate to do so. Further, it is appropriate for the Commission to require that

1 a party that proposes a particular program demonstrate the likely success of the program
2 and that success will not come at an unreasonable cost.

3 **Q. WHAT ARE THE KEY PROGRAM ELEMENTS NEEDED TO ADDRESS THE CONCERNS OF**
4 **VERY LOW-INCOME ELECTRIC CUSTOMERS?**

5 A. A program that reflects a three prong approach can best address the concerns of very low-
6 income program participants. The three prong approach focuses on meeting immediate
7 need while also addressing longer term issues of payment habits and affordability by
8 requiring 1) mandatory application for weatherization to address long term affordability,
9 providing 2) bill credits set at levels that reflect a household's income relative to the
10 Federal Poverty Level (FPL) to ensure an affordable energy burden at current average
11 energy consumption and by requiring timely payments and reduction of owed balances
12 through 3) an arrears repayment program component which requires some ongoing
13 minimum payment to reduce arrears coupled with an arrears repayment incentive.

14 **Q. WHAT ADDITIONAL PROGRAM PARAMETERS DOES PUBLIC COUNSEL SUPPORT?**

15 A. Any low-income program should be experimental, should require participants to apply for
16 LIHEAP and weatherization assistance, should include a plan for independent third party
17 evaluation and should accrue interest on any unspent rate-payer funds.

18 **Q. DOES EMPIRE ELECTRIC'S CURRENT LOW-INCOME PROGRAM ADHERE TO THE KEY**
19 **PROGRAM ELEMENTS AND ADDITIONAL PROGRAM PARAMETERS OUTLINED ABOVE?**

1 A. Generally, it does. Although in recent cases I have recommended three tiers of bill
2 discounts to better target support to align with need, Empire's current program does
3 reflect the key program elements. Empire's program includes two tiers of bill credits;
4 \$50 per month for customers at or below 50% of the FPL and \$20 per month for
5 customers above 50% of the FPL but not in excess of 125% of the FPL. The Company's
6 program requires mandatory participation in the arrears repayment program which
7 provides a 2 for 1 repayment matching incentive up to \$60 and allows up to 24 months
8 for repayment of arrears. The program also includes many of the additional parameters
9 described above. For example, the program has been designated as experimental,
10 includes a plan for independent third party evaluation and requires participants to apply
11 for LIHEAP and weatherization assistance.

12 ***III. Summary of Need Based Programs***

13 **Q. PLEASE DESCRIBE THE TYPES OF NEED BASED PROGRAMS AVAILABLE TO ASSIST LOW-**
14 **INCOME HOUSEHOLDS WITH ENERGY BILLS.**

15 A. There are a number of programs designed to assist low-income customers in paying
16 energy bills. These programs include government sponsored programs such as LIHEAP,
17 utility and ratepayer sponsored programs including bill credit programs, arrears
18 repayment programs, average pay plans, and discounts or special terms extended to
19 special need groups. There are also voluntary contributions generated from programs like
20 Dollar More and Dollar Help.

1 **Q. PLEASE PROVIDE AN OVERVIEW OF THE GOVERNMENT-SPONSORED LIHEAP PROGRAM.**

2 A. The following excerpts from the 2008 LIHEAP Policy Manual describe the purpose and
3 structure of the tax payer funded LIHEAP program.

4 *INTRODUCTION*

5
6 *Low-Income Home Energy Assistance Program (LIHEAP) is a block*
7 *grant program. It is designed to assist low-income individuals*
8 *particularly those with the lowest income, which pay a high proportion*
9 *of household income for home energy in meeting their immediate energy*
10 *needs. The grant is administered by the Federal Department of Health*
11 *and Human Services (HHS) Office of Community Service (OCS) within*
12 *the Administration for Children and Families (ACF). LIHEAP was*
13 *designed to provide help to low-income households targeting the elderly,*
14 *disabled and households with young children as insufficient heating and*
15 *cooling can cause health and safety issues for these homes.*

16
17 *The State of Missouri Family Support Division (FSD) applies for and*
18 *receives LIHEAP funding and then contracts with Missouri Community*
19 *Action Agencies (CAA) to conduct the eligibility determination for*
20 *LIHEAP applications.*

21 ...

22
23 *STRUCTURE*

24
25 *LIHEAP has two components: Energy Assistance (EA) and Energy Crisis*
26 *Intervention Program (ECIP). Eligibility requirements for LIHEAP are*
27 *based on income, household size, available resources and responsibility*
28 *for payment of home energy costs.*

29
30 *Energy Assistance (EA)*

31
32 *Energy Assistance is designed to provide financial assistance to help pay*
33 *primary fuel source heating bills for Missourians during the months of*
34 *October, November, December, January, February and March. The EA*
35 *benefit amount is based upon household size, income and the type of fuel*
36 *used for home heating.*

1 *Energy Crisis Intervention Program (ECIP)*

2
3 *ECIP is designed to provide financial assistance to households in a*
4 *verifiable energy crisis. This crisis is defined as receipt of termination*
5 *or disconnect notice indicating a specific disconnect date or final billing*
6 *statement advising the account has been terminated or if they are a cash*
7 *on delivery (COD) customer. ECIP funds can be used for primary or*
8 *secondary fuel sources.*

9
10 *Winter ECIP*

11
12 *Winter ECIP is primarily used to restore or prevent disconnection of*
13 *service when the amount of assistance available through EA and any*
14 *other state or local program is not adequate to secure this commitment*
15 *from the supplier.*

- 16
17 • *Is available from October through May based upon funding.*
18 • *Benefit amount is to be the amount required to resolve crisis.*
19 • *Maximum Benefit amount is \$800.00*

20
21 *Summer ECIP*

22
23 *Summer ECIP is primarily used to restore or prevent disconnection of*
24 *services of a cooling energy source during the summer months.*

- 25
26 • *Is available from June through September based upon funding.*
27 • *Benefit amount is to be the amount required to resolve crisis.*
28 • *Maximum Benefit amount is \$300.00*

29 **Q. PLEASE DESCRIBE UTILITY AND RATEPAYER SPONSORED PROGRAMS THAT ARE**
30 **DESIGNED TO ASSIST LOW INCOME HOUSEHOLDS IN PAYING ENERGY BILLS.**

31 **A.** A number of PSC regulated electric and gas utilities including Laclede Gas, Empire
32 District Electric, Empire District Gas, KCP&L Greater Mo. Operations (previously
33 Aquila LP and MPS) have experimental income based bill credit programs designed to
34 assist low-income customers in paying utility bills. Missouri Gas Energy and AmerenUE

1 Gas have had such programs in the past. These programs have typically provided credits
2 based on the level of household income relative to the FPL and reflect receipt of LIHEAP
3 assistance. Some of these regulated electric and gas utilities including Laclede Gas,
4 Empire District Electric and AmerenUE have experimental programs designed to assist
5 certain low-income customers in paying off past balances. Other utilities including
6 Empire District Gas, KCP&L Greater Mo. Operations (previously Aquila LP and MPS)
7 and Southern Missouri Natural Gas have implemented extended periods for repaying
8 unpaid balances.

9 All the utilities that I reviewed have average pay, budget billing or level pay plans
10 that allow customers to equalize monthly bills throughout the year.

11 Some utilities such as Empire District Electric also have special programs targeted
12 to make utility service more affordable for vulnerable customers such as the elderly or
13 disabled.

14 **Q. PLEASE DESCRIBE VOLUNTARY PROGRAMS THAT ARE DESIGNED TO ASSIST LOW-**
15 **INCOME HOUSEHOLDS IN PAYING ENERGY BILLS.**

16 **A.** AmerenUE, Laclede Gas, Empire District Electric, Empire District Gas, KCP&L,
17 Missouri Gas Energy, and Atmos Energy have programs that allow customers to make
18 voluntarily contributions when remitting utility bills. The contributions are used to assist
19 customers in need with paying utility bills. In certain instances, utilities make voluntarily
20 contributions that are not recovered in rates to assist customers in need.

1 **Q. PLEASE DESCRIBE OTHER PROGRAMS THAT ARE DESIGNED TO MAKE LOW-INCOME**
2 **ENERGY BILLS MORE AFFORDABLE.**

3 A. Rate-payer and shareholder contributions to low-income weatherization have become a
4 common element in the resolution of large company rate cases and in some cases for
5 smaller utilities. For example, as an element of the Stipulation and Agreement in Case
6 No. GR-2008-0060, Missouri Gas Utility voluntarily agreed to makes donations to a
7 community action agency in the Company's service area to promote low-income energy
8 conservation.

9 More recently in Case No. ER-2010-0036, the parties developed a Stipulation and
10 Agreement that would establish a low-income program to address the needs of very low-
11 income customers and the cooling needs of especially vulnerable low-income households.
12 The programs are to be funded roughly equally between shareholders and customers.

13 **Q. HAVE YOU INCLUDED AN ATTACHMENT IN YOUR TESTIMONY THAT PROVIDES GREATER**
14 **DETAIL ON THE TYPES OF ASSISTANCE PROGRAMS THAT YOU HAVE DISCUSSED.**

15 A. Yes. Attachment BAM SUP DIR-1 includes tariff sheets, Commission orders and other
16 documentation related to each of the programs discussed in my testimony.

1 **Q. WHAT IS YOUR GENERAL IMPRESSION OF THE PERFORMANCE OF COMMISSION**
2 **APPROVED LOW-INCOME PROGRAMS?**

3 Q. My general impression is that programs that incorporate income based bill credits and
4 arrears repayment components have shown some level of success in improving the
5 affordability of energy bills and the timeliness of payments and resulted in reduced
6 arrears at least while participants remain in a program. However, the primary weakness
7 appears to be low subscription to the programs. Some of the causes of low subscription
8 in various programs include obstacles to participation such as limiting the period of
9 participation, insufficient outreach, and insufficient administration and oversight.

10 **Q. DOES THE COMMISSION HAVE TOOLS WITHIN THE REGULATORY FRAMEWORK TO ASSIST**
11 **LOW-INCOME CUSTOMERS?**

12 A. Absolutely. The Commission has some discretion with respect to both revenue
13 requirement and rate design issues that can impact the bills faced by low income
14 customers. For example, the Commission has recognized in past cases that there is a
15 reasonable range for the rate of return upon which future rates are based. By approving a
16 return at the lower end of the reasonable range, the Commission can assist in making all
17 customers bills more affordable including the bills faced by low-income customers. The
18 Commission can also approve rate designs that propose relatively low customer charges.
19 Low-income households have on average, lower electric use than higher income

1 households. By keeping the customer charge relatively low, the Commission can mitigate
2 some of the burden faced by low-income households.

3 ***IV. Considerations in Designing Affordable Low-Income Energy Bills***

4 **Q. HOW IS LOW-INCOME DEFINED?**

5 A. Low-income is often defined in terms of a household's income and family size relative to
6 Federal Poverty Guidelines. Shown below is a matrix of annual poverty guidelines based
7 on the monthly poverty guidelines stated in the LIHEAP Policy and Procedures Manual
8 developed by the Missouri Department of Social Services-Family Support Division. The
9 table illustrates household incomes by household size in relation to the Federal Poverty
10 Guidelines.

Poverty Level by Household Size(FY2010)

Annual Poverty Level Range	Household Size							
	1	2	3	4	5	6	7	8
25%	\$2,709	\$3,642	\$4,578	\$5,514	\$6,447	\$7,383	\$8,319	\$9,252
50%	\$5,418	\$7,284	\$9,156	\$11,028	\$12,894	\$14,766	\$16,638	\$18,504
75%	\$8,127	\$10,926	\$13,734	\$16,542	\$19,341	\$22,149	\$24,957	\$27,756
100%	\$10,836	\$14,568	\$18,312	\$22,056	\$25,788	\$29,532	\$33,276	\$37,008
125%	\$13,545	\$18,210	\$22,890	\$27,570	\$32,235	\$36,915	\$41,595	\$46,260
135%	\$14,629	\$19,667	\$24,721	\$29,776	\$34,814	\$39,868	\$44,923	\$49,961
150%	\$16,254	\$21,852	\$27,468	\$33,084	\$38,682	\$44,298	\$49,914	\$55,512
200%	\$21,672	\$29,136	\$36,624	\$44,112	\$51,576	\$59,064	\$66,552	\$74,016

11 Various federal programs treat household incomes of up to 200% of the FPL as
12 low-income for purposes of providing income based assistance and services. However, in
13 my experience, thresholds of 125% to 150% are more commonly used. For example,

1 thresholds of 125% to 150% of the FPL are generally used to determine eligibility for
2 Federal and state LIHEAP programs.

3 An alternative method for defining low-income is as a percentage of median
4 household income. This method is also used by certain federal and state agencies for
5 purposes of determining eligibility for public assistance. For example, incomes below a
6 certain percentage of median household income have been used to determine eligibility
7 for LIHEAP and low-income housing assistance.

8 **Q. HOW SHOULD VERY LOW-INCOME BE DEFINED?**

9 A. For purposes of establishing low-income energy assistance programs, I believe that
10 defining "very low-income" in terms of the FPL is administratively easier than a
11 definition based on median income because of the more widespread use in Missouri of
12 FPL based thresholds for use of administering LIHEAP. In response to the Commission's
13 Order, I believe that a threshold of 100% of the FPL could reasonably be used to define
14 "very low-income." As shown below, based on census data for the period 2006-2008, a
15 combined total of about 13.3% of households had income at or below 100% of the FPL.

Household Income Relative to the FPL	Proportion of Missouri Households
50%	5.7%
75%	3.5%
100%	4.1%
125%	4.5%
150%	4.9%
175%	4.6%
185%	1.9%
200%	3.1%
300%	18.9%
400%	15.3%
500%	11.1%
more	22.3%

1 **Q. HOW DOES USING 100% OF THE FEDERAL POVERTY LEVEL TO DEFINE VERY LOW-**
2 **INCOME COMPARE TO MEDIAN INCOME BASED DEFINITIONS OF VERY LOW-INCOME?**

3 A. The U.S. Department of Housing and Urban Development (HUD) generally uses a
4 threshold of 50% of the median household income to define “very low-income.”
5 Missouri’s 2008 median household income was \$46,408. Fifty percent of the median
6 income or \$23,204 is somewhat above 100% above the FPL for a family of four.

7 **Q. WHAT BENEFITS ARE ASSOCIATED WITH AFFORDABLE LOW-INCOME ENERGY BILLS?**

8 A. Affordable energy bills benefit low-income households by potentially reducing unpaid
9 balances, late payment charges and disconnection of necessary utility services. The
10 general body of rate-payers may also benefit through potential cost reductions associated
11 with lower uncollectibles and scale economies achieved by higher and more consistent
12 subscription by low-income households to the shared system.

13 **Q. HOW IS THE AFFORDABILITY OF ENERGY BILLS MEASURED?**

1 A. The concept of a household's "energy burden" is a generally accepted method of
2 measuring the affordability of energy bills. Energy burden is determined by the
3 proportion of household gross income spent on energy bills. Roger Colton, a recognized
4 authority on low-income energy affordability, estimates that an "affordable burden" for
5 total home energy bills may be set at 6% of gross household income. The 6% threshold
6 was developed based on a study of affordable housing costs and the proportion of those
7 costs related to energy consumption.

8 **Q. HOW DOES A 6% ENERGY BURDEN COMPARE TO THE ENERGY BURDEN FACED BY**
9 **MIDWEST HOUSEHOLDS AT VARIOUS INCOME LEVELS?**

10 A. Based on information reported by the U.S. Department of Health and Human Services in
11 the 2007 LIHEAP Home Energy Notebook, for the Midwest Census Region the median
12 residential energy burden for households using electric as the main heat source was 3.9%
13 for all households, 2.3% for non low-income households, 6.8% for low-income
14 households and 10.4% for households receiving LIHEAP.¹ These energy burdens
15 correspond to annual energy expenditures for households using electric as the main heat
16 source of \$1,344 for all households, \$1,476 for non low-income households, \$1,180 for
17 low-income households, and \$1,156 for households receiving LIHEAP. Based on these
18 data, low-income households including LIHEAP recipients face an energy burden of
19 approximately 3 to 5 times the energy burden faced by non low-income households. It is

¹ 2007 LIHEAP Home Energy Notebook ,Table A-3c

1 important to note that the energy burdens reported above are an average measure of the
2 energy burden for the respective group. Within a group the energy burden can be
3 substantially higher for the lowest income levels. Attachment BAM SUP DIR-2 contains
4 estimates of the energy burden broken down by percentage of the Federal Poverty Level
5 for households in Missouri counties for the year 2008. Statewide, households with
6 incomes of less than 50% of the Federal Poverty Level face an average energy burden of
7 42.2%, far exceeding the 6% cited by Roger Colton and the 4% reflective of the Midwest
8 Region energy burden for all households. Households with incomes of between 50% and
9 75% of the Federal Poverty Level face a lower average energy burden of 17.1%
10 Households with incomes of between 75% and 100% of the Federal Poverty Level face
11 an even lower average energy burden of 12.2%.

12 **Q. SHOULD THE COMMISSION CONSIDER A RANGE OF 4% TO 6% TO BE A REASONABLE**
13 **PROXY FOR AN AFFORDABLE ENERGY BURDEN IN MISSOURI?**

14 **A.** Yes. A range of 4% to 6% reflects both a nationally recognized level and a level specific
15 to the average burden for our region.

16 **Q. WOULD SETTING A LOW-INCOME RATE AT THE LEVEL OF AN INDUSTRIAL RATE ENSURE**
17 **THAT SUPPORT IS PROVIDED IN PROPORTION TO NEED?**

18 **A.** No. There is no evidence and it is unlikely that reduced rates set uniformly for
19 households with differing incomes relative to the FPL will result in support appropriately
20 targeted to need. For example, as discussed above the energy burden varies by level of

1 income; 42.2% for households with incomes of less than 50% of the FPL; 17.1% for
2 households with incomes of between 50% and 75% of the FPL and 12.2% for households
3 with incomes of between 75% and 100% of the FPL. This indicates that the lower the
4 household income, the greater the support amount needed to achieve an affordable energy
5 burden. However, under a program that sets reduced rates uniformly for households with
6 differing incomes relative to the FPL, the level of support would be similar if usage were
7 similar.

8 **Q. COULD SETTING A LOW-INCOME RATE AT 4% OR 6% OF HOUSEHOLD INCOME ENSURE**
9 **THAT SUPPORT IS PROVIDED IN PROPORTION TO NEED?**

10 A. It could. However, basing rates on individual household income would likely be
11 complicated and administratively burdensome. Additionally, if no cap were imposed on
12 usage or the total household discount, a percentage of income plan could provide price
13 signals contrary to promoting conservation.

14 **Q. CAN BILL CREDITS BE DESIGNED TO ACHIEVE AN ENERGY BURDEN OF 4% OR 6% OF**
15 **HOUSEHOLD INCOME AND ENSURE THAT SUPPORT IS PROVIDED IN PROPORTION TO**
16 **NEED?**

17 A. Yes. Bill credits can be designed to achieve an energy burden of 4% or 6% of household
18 income by setting the level of bill credits at a level that recovers the difference between
19 anticipated household energy expenditures and an affordable level of energy expenditures
20 based on 4% to 6% of household income. Since the affordable level of energy

1 expenditures increases with household income, a graduated system of bill credits is a
2 reasonable method for providing support in proportion to need while also minimizing
3 administrative burden and cost.

4 **Q. DOES THIS CONCLUDE YOUR SUPPLEMENTAL DIRECT TESTIMONY?**

5 **A. Yes.**