Exhibit No.: Energy Efficiency Program

Issue(s):
Witness/Type of Exhibit:
Sponsoring Party:

Case No.:

Marke/Surrebuttal Public Counsel GR-2014-0152

# SURREBUTTAL TESTIMONY

## **OF**

# **GEOFF MARKE**

Submitted on Behalf of the Office of the Public Counsel

# LIBERTY UTILITIES (MIDSTATES NATURAL GAS) CORP. D/B/A LIBERTY UTILITY

**CASE NO. GR-2014-0152** 

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities'	ý	
Tariff Revisions Designed To Implement a	)	
General Rate Increase for Natural Gas Service	3	Case No. GR-2014-0152
in the Missouri Service Areas of the Company	Ś	
	.5	

#### AFFIDAVIT OF GEOFF MARKE

STATE OF MISSOURI	)	
	)	SS
COUNTY OF COLE	)	

Geoff Marke, of lawful age and being first duly sworn, deposes and states:

- 1. My name is Geoff Marke. I am a Regulatory Economist for the Office of the Public Counsel.
- 2. Attached hereto and made a part hereof for all purposes is my surrebuttal testimony.
- 3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Geoff Marke

Subscribed and sworn to me this 15<sup>th</sup> day of August 2014.

NOTARY SEAL S

JERENE A. BUCKMAN My Commission Expires August 23, 2017 Cole County Commission #13754037

Jerene A. Buckman Notary Public

My commission expires August 23, 2017.

# TABLE OF CONTENTS

<u>Testimony</u>	Page
Introduction and Recommendation	1
Energy Efficiency	3
Low-Income Weatherization	7

## SURREBUTTAL TESTIMONY

**OF** 

## **GEOFF MARKE**

#### LIBERTY UTILITIES

#### **CASE NO. GR-2014-0152**

1	Q.	Please state your name, title and business address.
2	A.	Dr. Geoff Marke, Economist, Office of the Public Counsel (OPC or Public Counsel), P.O.
3		Box 2230, Jefferson City, Missouri 65102.
4	I.	INTRODUCTION AND RECOMMENDATION
5	Q.	What is the purpose of your surrebuttal testimony?
6	A.	The purpose of this testimony is to respond to comments regarding an energy efficiency (EE)
7		program for Liberty in the rebuttal testimony of the Missouri Public Service Commission's
8		Staff (Staff) witness Kory Boustead. I will also respond to the rebuttal testimony of the
9		Missouri Division of Energy's (DE) witness Joe Gassner and his proposed treatment of low-
10		income weatherization funding and administration for Liberty.
11	Q.	Please summarize your educational and employment background.
12	A.	I received a Bachelor of Arts Degree in English from The Citadel, a Masters of Arts Degree
13		in English from The University of Missouri, St. Louis, and a Doctorate of Philosophy in
14		Public Policy Analysis from Saint Louis University (SLU). At SLU, I served as a graduate

assistant where I taught undergraduate and graduate course work in urban policy and public

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finance. I also conducted mixed-method research in transportation, economic development, and emergency management.

I have been in my present position with OPC since April of 2014 where I have been responsible for economic analysis and policy research in electric utility operations. Prior to joining OPC, I was employed by the Missouri Public Service Commission as a Utility Policy Analyst II in the Energy Resource Analysis Section, Energy Unit, Utility Operations Department, Regulatory Review Division. My primary duties in that role involved reviewing, analyzing and writing recommendations concerning electric utility resource planning, fuel adjustment clauses, and demand-side management programs. I have also been employed by the Missouri Department of Natural Resources (later transferred to the Department of Economic Development), Energy Division where I served as a Planner III and functioned as the lead policy analyst on electric cases. I have worked in the private sector, most notably serving as the Lead Researcher for Funston Advisory based out of Detroit, Michigan. My experience with Funston involved a variety of specialized consulting engagements with both private and public entities; additionally, I have provided analysis on independent compliance audits.

#### Q. Please summarize your primary positions and conclusions?

A. Public Counsel recommends that the Commission suspend any expenditures towards

Liberty's energy efficiency program until they are subject to a current cost-effectiveness

screening under the guidance of Liberty's Energy Efficiency Advisory Group. It would be

1		premature and inappropriate to agree to any funding level before the Commission knew
2		whether the programs are cost-effective as designed.
3		Additionally, in this case, Public Counsel recommends the Commission not approve DE's
4		request that up to 5% of the Low Income Weatherization funding be directed to DE to
5		administer and monitor the program.
6	II.	ENERGY EFFICIENCY
7	Q.	What are Liberty's current EE programs?
8	A.	Liberty's current EE portfolio includes the following items:
9		Customer education outreach
10		o Workshops held to educate teachers how to teach energy efficiency and
11		sustainability to their students
12		High Efficiency Natural Gas Water Heating and Space Heating Rebates
13		o Programmable thermostat
14		<ul><li>Rebate of \$25</li></ul>
15		o Energy Star rated natural gas furnace
16		■ AFUE ≥ 92% and < 94% rebate of \$200
17		■ AFUE ≥ 94% and < 96% rebate of \$250
18		■ AFUE ≥ 96% rebate of \$300
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1	o Energy	Star rated boiler	
2		AFUE $\geq$ 85% and $<$ 90%	rebate of \$200
3		$AFUE \ge 90\%$	rebate of \$300
4	o Energy	Star rated combination space	e heating and water heating systems
5		Rebate of \$450	
6	o Water h	neating system	
7		$EF \ge 0.62 \text{ and } < 0.67$	rebate of \$50
8		$EF \ge 0.67 \text{ and } < 0.82$	rebate of \$125
9		$EF \ge 0.82$	rebate of \$200
10	The Energize L	iberty Utilities Homes Progr	am
11	o A prog	ram intended to promote e	energy efficiency for existing residential
12	custom	ers by offering free direct in	stallation of low-cost energy conservation
13	measur	res, financial incentives for en	nergy audits and the installation of natural
14	gas en	ergy-efficiency measures th	nat improve home energy performance.
15	Rebate	s can include:	
16		100 percent of the energy au	adit (up to \$500)
17		100 percent of the direct	installation costs where measures are
18		deemed appropriate	
19		Additional incentives to off	Set the cost of eligible building shell and
20		equipment	
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Case No. GR-2014-0152 Up to \$2000 for Tier 1 (achieve 10% natural gas savings) 1 Up to \$5000 for Tier 2 (achieve 20% natural gas savings) 2 How have Liberty's EE programs performed to date? 3 Q. According to a July 23<sup>rd</sup> Energy Conservation and Efficiency Program Update, Liberty 4 Α. reported that in their most recent program year (Sep 13 – Aug 14) total spending consisted of 5 6 70.1% of their allocated budget. This was an increase from the previous year (60.3%) which 7 was almost entirely realized through an uptick in furnace rebates. Regardless, the company 8 has not come close to exceeding their annual allocated budget in any given program year. 9 Are these programs cost-effective? Q. These programs may have been cost-effective in 2010, but it would be incorrect to assume 10 A. 11 that all of these measures are cost effective in August 2014. Could you give an example of a rebate that may not be cost effective anymore? 12 Q. 13 A. There are numerous evaluations that suggest that actual energy savings for programmable thermostats often fall short of expected savings. Indeed, ENERGY STAR, the Environmental 14 15 Protection Agency's (EPA) own program to identify and promote energy efficiency measures, elected to suspend labeling programmable thermostats with their designation in 16 2009 and have since not revisited it due to their overstated performance. 17 18 For programmable thermostats to manifest expected realization rates, attention needs to be

allocated to defining accurate assumptions about consumer behavior. What recent

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1 evaluations have shown is that, especially in territories where the avoided energy costs are 2 low, customer's value comfort more than energy efficiency savings. That conclusion is 3 drawn from evaluation, measurement and verification (EM&V) reports that measure, in part, the realization rate, which shows the difference between the evaluated savings against the 4 5 estimated savings. In Missouri, this was most recently seen with the results of Ameren Missouri's EM&V of their programmable thermostat.<sup>1</sup> In that study 56.10% of the participants were estimated to be "free riders2" and the realization rates of actual energy 8 savings were so poor that the measure was dropped entirely as a stand-alone item in the first year of a three-year cycle.<sup>3</sup>

> This is just one example. Presently, there is no assurance that any of the current programs are cost effective.

#### Q. What steps would need to take place to remedy this potential problem?

This issue was raised at Liberty's Energy Efficiency Advisory Group on July 23rd and the company has proposed to create a request for proposal to solicit bids from consultants to perform cost-effective tests on measures for the next program year. Because of the uncertainty inherent in the present program design, Public Counsel cannot support increasing Liberty's EE budget and has reservations about moving forward with any future expenditures until more information becomes available.

See EO-2012-0142: Revised Evaluation, Measurement and Verification (EM&V) Reports 6/12/2014

<sup>&</sup>lt;sup>2</sup> This evaluation term describes energy efficiency program participants who would have taken the recommended actions on their own, even if the program did not exist. http://aceee.org/glossary/9#letterf

Realization rates of only 15% were seen in Ameren's CoolSavers Program and only 19% as a standalone measure in their RebateSavers Program.

#### III. LOW-INCOME WEATHERIZATION

- Q. Does Public Counsel support DE's proposal for an annual funding level of \$105,000 for low-income weatherization?
  - A. Public Counsel recommends the Commission support this proposed amount as it is both appropriate and consistent with the amount of funds relative to other Commission-approved low-income weatherization programs.
  - Q. Does Public Counsel support the proposal that up to 5% of the \$105,000.00 funding level be directed to DE to administer and monitor the low-income weatherization program?
  - A. Public Counsel recommends that the Commission not approve this proposal. The annual funding would be better utilized for its intended purposes—weatherizing low income homes; and the amount of weatherization activity at issue in this case is very limited. Presently, DE receives federal funds to administer and monitor weatherization activities, and those funds are sufficient to ensure both accountability and training of the local Community Action Partnership (CAP) agencies in this case. If DE needs more funds to administer and monitor the limited weatherization activities at issue in this case, Public Counsel believes the appropriate way to augment DE's budget is through the legislative process, and not through ratemaking.

- 1 | Q. Does this conclude your testimony?
- 2 A. Yes, it does.