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**Energy Efficiency** 

Witness:

John Buchanan

Sponsoring Party:

Missouri Department of Economic

Development - Division of Energy

Type of Exhibit:

Direct Testimony

Case No.:

GR-2014-0007

# MISSOURI PUBLIC SERVICE COMMISSION MISSOURI GAS ENERGY A DIVISION OF LACLEDE GAS COMPANY

CASE NO. GR-2014-0007

DIRECT TESTIMONY

OF

JOHN BUCHANAN

ON

BEHALF OF

## MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT DIVISION OF ENERGY

Jefferson City, Missouri January 29, 2014

(Revenue Requirement)

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1	I. <u>INTRODUCTION</u>
2	
3	Q. Please state your name and business address.
4	A. John Buchanan, Missouri Department of Economic Development, Division of Energy, 301
5	West High Street, Suite 720, Jefferson City, Missouri.
6	Q. What is the Division of Energy?
7	A. The Division of Energy (DE) is a division of the Missouri Department of Economic
8	Development (DED) and is the designated state energy office in Missouri responsible for the
9	administration of several federal programs and grants including the federal Low Income
10	Weatherization Assistance Program (LIWAP) and the federal State Energy Program (SEP)
11	established by the United States Congress in 1978, which is managed nationally by the
12	United States Department of Energy (USDOE). The SEP consists of several statewide energy
13	efficiency programs administered by the DE and funded by the USDOE. The DE is vested
14	with the powers and duties set forth in Chapter 640.150, RSMo.
15	Q. What is your position with the Missouri Division of Energy?
16	A. I am the Senior Planner in the DE's Energy Policy and Resources Program at the Missouri
17	Department of Economic Development.
18	Q. On whose behalf are you testifying?
19	A. I am testifying on behalf of the DE, an intervenor in these proceedings.
20	Q. Please describe your educational background and business experience.
21	A. I joined the Missouri Department of Natural Resources' (DNR) DE in July of 1980 as
22	director of the Missouri Residential Conservation Service Program, a congressionally
23	mandated investor-owned electric and natural gas utility Demand Side Management

1		initiative. In 1986, I was promoted to serve as the Senior Planner within the Director's
2	-	Office at the DE. In this capacity, I was involved in a variety of programs and projects
3		addressing energy, environmental, and natural resource issues. In October 1995, I was
4		appointed as a Senior Planner within the Policy and Planning Unit at the DE where my
5		responsibilities include preparation of testimony filed in general rate or other cases by the
6		DNR before the Missouri Public Service Commission (Commission), energy efficiency
7		program design and development, energy emergency planning, energy supply and price
8		monitoring and energy-related policy development. Governor Jay Nixon by Executive Order
9		13-03 transferred the DE from the DNR to the DED effective August 28, 2013. Prior to my
10		employment with the DNR, I served as Special Assistant to the Mayor, City of Columbia,
11		Missouri for two years. I have a Bachelor of Arts degree in Political Science from Columbia
12		College. I am a former Fellow of Missouri University, where I received my Master of
13		Science in Public Administration.
14	Q.	Are you currently working with Missouri gas utilities to implement energy efficiency
15		initiatives?
16	A.	Yes. Since 1980 I have worked directly with investor-owned regulated gas utilities on
17		several natural gas energy efficiency initiatives including the federal Residential
18		Conservation Service Program established by Congress. This was the first nationwide
19		utility-sponsored non-low income residential energy efficiency program under the guidance

1) Ameren Missouri (natural gas) established by GR-2003-0517;

representative on the following utility efficiency collaboratives:

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of the USDOE. Currently, I am a charter member of several natural gas energy efficiency

collaboratives authorized by the Commission and currently serve as the designated DE

1	2) Author Energy Corporation, now Liberty Utilities, established by GR-2006-0387;
2	3) The Empire District Gas Company established by ER-2006-0315
3	3) Laclede Gas Company established by GR-2007-0208; and,
4	4) Missouri Gas Energy established by GR-2006-0422 and GT-2008-0005, and continued
5	as a result of the company's last rate case, GR-2009-0355.
6	
7	II. PURPOSE AND SUMMARY OF TESTIMONY
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9	Q. What is the purpose of your direct testimony in these proceedings?
10	A. The purpose of my testimony is to address natural gas related energy efficiency issues with
11	respect to Missouri Gas Energy (MGE). I will specifically offer testimony regarding:
12	(1) The acquisition of MGE by Laclede Gas Company (Laclede) and the need to continue the
13	formal working consensus collaborative group's efforts to implement cost-effective
14	energy efficiency initiatives with the additional goal of making MGE's programs more
15	consistent with Laclede's energy efficiency programs.
16	(2) Energy conservation and energy efficiency programs currently administered by MGE and
17	approved by the Commission in MGE's last rate case, GR-2009-0355; and,
18	(3) Future investments by MGE to design, implement and evaluate successful energy
19	efficiency programs for residential and commercial (small and large general service)
20	customers.
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- 3 Q. What recommendations do you have regarding energy efficiency programs for MGE?
- 4 A. To assist MGE in its efforts to fully identify, develop and implement appropriate energy
- 5 efficiency programs designed to reduce natural gas consumption by its customers that may
- lead to lower utility bills, the DE recommends that the Commission:
- 7 (1) Approve the continuation of the Energy Efficiency Collaborative (EEC) authorized by
- the Commission in the company's last rate case GR-2009-0363 consisting of
- 9 representatives from MGE, Staff, the Office of Public Counsel, the DE, and other
- interested parties that have intervened in this rate case to facilitate energy-efficiency
- activities undertaken by MGE. The collaborative should continue to serve in a consensus
- capacity to help guide MGE's energy efficiency planning and implementation process.
- MGE should implement the most appropriate and cost-effective slate of energy efficiency
- programs to meet the needs of its customers and share-holders;
- 15 (2) Require MGE to commit to adequately fund the energy efficiency programs identified by
- the collaborative that are determined to be cost effective. Annual funding levels should
- 17 continue at a targeted level of no less than 0.5 percent of MGE's annual operating
- revenues (which would be a funding level of approximately \$4 million) beginning in
- calendar year 2014 following authorization by the Commission at the conclusion of this
- 20 rate case.
- 21 (3) Reconsider the Commission requirement to allocate energy efficiency funds between the
- 22 SGS class and the Residential class.
- 23 (4) Require MGE to continue to report progress to the Commission and the EEC.

- 1 (5) Continue, at a minimum, MGE's current energy efficiency initiatives with the assistance 2 and coordination of the EEC.
- Q. Is there data to support the 0.5 percent level of energy efficiency investment that would result in direct benefits to natural gas customers, the utility and shareholders?
- 5 A. Yes. The National Action Plan for Energy Efficiency sponsored by the USDOE and the
- 6 United States Environmental Protection Agency and prepared by 50 leading organizations,
- 7 including a variety of natural gas companies, noted the most effective energy efficiency
- 8 projects were funded at a level equal to a minimum range of 0.5 to 1.5 percent of a natural
- gas utility's annual operating revenue. DE proposes that MGE continue its current energy
- efficiency target funding level of no less than 0.5 percent of annual operating revenue or
- approximately \$4 million based on the company's gross annual operating revenue for
- calendar year 2013.
- 13 Q. Were recommendations presented by the National Action Plan for Energy Efficiency
- used by MGE in designing and implementing the current energy efficiency initiatives?
- 15 A. Yes. The current MGE energy efficiency initiatives were initiated through the consensus
- process by the Energy Efficiency Collaborative (EEC). Further, MGE, with assistance from
- the EEC, has adopted cost effective energy efficiency program measures. (MGE Response to
- Data Requests, DED 0001, DED 0002 and DED 0003 December 19, 2013)
- 19 Q. What level of energy efficiency funding should the Commission authorize for MGE?
- 20 A. The DE recommends the continuation of the current annual target funding level of 0.5
- 21 percent of MGE's gross operating revenue to implement cost-effective energy efficiency
- programs for its Residential, Small General Service (SGS), Large General Service (LGS) and

<sup>&</sup>lt;sup>1</sup> National Action Plan for Energy Efficiency, July 2006

1	Large volume (Lv) customers. This recommended funding level is a minimum level of
2	investment to support energy efficiency initiatives.
3	Q. Has the Commission used energy efficiency program funding based on utility operating
4	revenue?
5	A. Yes. The Commission used utility operating revenue as a basis to fund energy efficiency
6	initiatives in MGE's last rate case, GR-2009-0355. Specifically, the Commission, in its
7	Report and Order stated,
8 9 10 11 12 13 14 15	The Commission finds that DNR's position is persuasive in that energy efficiency funding should be tied to MGE's annual gross operating revenues. The Commission further finds that DNR's request that .5% of MGE's annual gross operating revenues should be allocated for energy efficiency funding and that it is an appropriate goal or benchmark in expenditures for natural gas utilities. The Commission finds that the EEC should take all steps necessary to work toward implementation of cost-effective energy efficiency programs to reach this goal to maximize benefits. <sup>2</sup>
17	Q. Has the Commission supported energy efficiency program funding based on utility operating
18	revenue for other natural gas utilities?
19	A. Yes. In GR-2010-0171, the Commission originally authorized the 0.5 percent target level of
20	funding for Laclede:
20 21 22 23 24 25 26 27 28 29 30	Laclede further agrees to fund up to a target level of One Million, Seven Hundred Thousand Dollars (\$1,700,000) annually for the first year after the rates in this case become effective to fund cost-effective conservation and energy efficiency programs that have been developed or are developed as a result of the Energy Efficiency Collaborative ("EEC") process. For subsequent plan years, Laclede will work with the EEC to take reasonable actions toward a goal of increasing the funding level for cost-effective conservation and energy efficiency programs for the plan year ending in 2013 to 0.5% of the annual average of the Company's Missouri jurisdictional gas distribution operating revenues including cost of gas for Residential, Commercial and Industrial, and Interruptible Customers for the fiscal years ending 2008, 2009 and 2010, as such revenues are set forth in the

<sup>&</sup>lt;sup>2</sup> Missouri Public Service Commission Case No. GR-2009-0355, In the Matter of Missouri Gas Energy and Its Tariff Filing to Implement a General Rate Increase for Natural Gas Service; Report and Order, Effective: February 20, 2010, page 63.

Company's 10-K filings with the Securities and Exchange Commission. Such target levels shall remain in effect until the effective date of a commission order mandating otherwise in a subsequent rate case or until the parties unanimously agree to request and the Commission approves a different target level amount. Any portion of the \$150,000 annual funding amount included in rates that is not expended in a given year shall be transferred as a credit to the regulatory asset account for energy efficiency costs.<sup>3</sup>

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Likewise, in GR-2009-0434, Empire District Gas Company's last rate case, the Commission

#### ordered the following:

The Empire District Gas Company is directed to budget for energy efficiency programs previously approved in the *Partial Stipulation and Agreement* at levels that will begin at \$231,200 in 2010; and to take all reasonable actions toward the goal of increasing expenditures for those programs to .5 percent of annual operating revenues, including gas costs, for 2011 and 2012.<sup>4</sup>

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#### Q. Did the Commission address energy efficiency target funding level in Laclede's last rate

case?

#### A. Yes. The Stipulation and Agreement in Laclede's last rate case, GR-2013-0171, noted:

21 Laclede will continue to work with its Energy Efficiency Collaborative ("EEC") to develop cost-effective conservation and energy efficiency programs under the 22 same terms and conditions as exist today, except that, for the 12 month period 23 24 beginning October 1, 2013, the funding level goals as referenced in the Second Stipulation and Agreement in Case No. GR-2010-0171 shall be updated to 25 \$4,235,000, which is .5% of the annual average of the Company's Missouri 26 jurisdictional gas distribution operating revenues for the Laclede Gas division 27 service territory, including cost of gas for Residential, Commercial and Industrial, 28 29 and Interruptible Customers for the fiscal years ending 2010, 2011 and 2012, as 30 such revenues are set forth in the Company's 10-K filings with the Securities and Exchange Commission, or if not set forth in those filings, then through another 31 credible source.5 32

<sup>&</sup>lt;sup>3</sup> Missouri Public Service Commission Case No. GR-2010-0171, *In the Matter of Laclede Gas Company's Tariff to Revise Natural Gas Rate Schedules;* Second Stipulation and Agreement, pages 5-6, Report and Order, Effective: August 18, 2010.

<sup>&</sup>lt;sup>4</sup> Missouri Public Service Commission Case No. GR-2009-0434, In the Matter of The Empire District Gas Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Gas Service Provided to Customers in the Missouri Service Area of the Company, Report and Order on DSM Funding, Effective March 1, 2010, pages 15-16.

<sup>5</sup> Missouri Public Service Commission Case No. GR-2013-0171, In the Matter of Laclede Gas Company's Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas, Stipulation and Agreement, May 31, 2013, page 13, approved by Report and Order, Effective July 8, 2013.

1 2	Q. Did the Commission authorize future energy efficiency target funding levels for
3	Laclede?
4	A. Yes. The Commission authorized a target level of funding formula for future years beyond
5	October 1, 2013:
6 7 8 9 10 11 12 13	For the 12 month period beginning each October 1 thereafter, such target levels shall be updated to .5% of the moving average of these revenues over the three previous years. This updating method shall remain in effect until the effective date of a Commission order mandating otherwise in a subsequent rate case or until the parties unanimously agree to request and the Commission approves a different method or target level amount. <sup>6</sup>
14	Q. Should the Commission consider a similar energy efficiency target funding level approach fo
15	MGE and if so, why?
16	A. Yes. With the acquisition of MGE by Laclede as authorized by the Commission in GM-2013-
17	0254, MGE and Laclede "started a fact-finding mission to understand each utility energy
18	efficiency tariffs, programs, contracts, and reportingthat implementing parallel programs
19	would be a focusbring consistency to rebate process, and with the pending MGE rate case, a
20	desire to issue new RFP's for a residential and C&I rebate program administrator that would
21	lead to cost savings for both utilities." (MGE Response to Data Request, DED 0006,
22	December 19, 2013). To maintain consistency in target funding levels among Missouri gas
23	companies, the Commission should authorize the same funding approach here as it authorized
24	for Laclede in the company's last rate case, GR-2013-0171.

<sup>&</sup>lt;sup>6</sup> Missouri Public Service Commission Case No. GR-2013-0171, *In the Matter of Laclede Gas Company's Filing of Revised Tariffs to Increase its Annual Revenues for Natural Gas*, Stipulation and Agreement, May 31, 2013, page 13, approved by Report and Order, Effective July 8, 2013.

- Q. Please identify other investor-owned natural gas utilities for which the Commission has
- 2 authorized target funding levels for energy efficiency.
- 3 A. In addition to Empire District Gas, Laclede and MGE, as discussed above, the Commission
- 4 has authorized target funding levels for Ameren Missouri and Liberty Utilities.

#### IV. NATURAL GAS ENERGY EFFICIENCY INITIATIVES

- 6 Q. Please briefly summarize MGE's current energy efficiency initiatives.
- A. In MGE's last rate case, GR-2009-0355, the Commission stated in the Report and Order:
- 9 "(Energy Efficiency) Funds shall be divided proportionally between classes (the new SGS
- 10 class would receive up to 10% of the funding, Residential will receive up to 90%)."<sup>7</sup> To that
- end, the EEC determined through a series of energy efficiency collaborative meetings to offer
- rebates for residential customers to encourage the purchase and installation of ENERGY
- STAR® qualified natural gas utilization equipment including furnaces, water heaters and
- boilers. Rebates for programmable thermostats were also made available.
- 15 Q. Please continue.

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- A. In addition, the Commission authorized energy efficiency incentives for the newly created
- 17 Small General Services (SGS) classification:
- The SGS Energy Efficient Natural Gas Equipment Incentive Program shall be
- designed to encourage more effective utilization of natural gas by encouraging
- 20 energy efficiency improvements through the replacement of less efficient natural
- 21 gas equipment with high efficiency Energy Star qualified natural gas equipment
- and other high efficiency equipment and measures. MGE shall solicit input from
- 23 the EEC on specific programs and incentive levels. Depending on the results of
- 24 the programs MGE may in the future request permission from the Commission to
- expand the program to include other program options after dialogue with the
- 26 EEC. The incentive could include but would not be limited to the following
- 27 Energy Star qualified appliances:

<sup>&</sup>lt;sup>7</sup> Missouri Public Service Commission Case No. GR-2009-0355, *In the Matter of Missouri Gas Energy and Its Tariff Filing to Implement a General Rate Increase for Natural Gas Service;* Report and Order, Effective: February 20, 2010, page 62 and page 63.

i	Natural gas forced air furnaces
2	Natural gas water heater
3	Natural gas boiler systems
4	Natural gas combination systems
5	Commercial natural gas utilization equipment, such as
6	Modulating burners
7	Venturi steam traps
8	Kitchen exhaust hoods
9	Waste heat recovery
10	Heat exchangers <sup>8</sup>
11	Q. What has been the impact of the directive in MGE's last rate case, GR-2009-0355 for
12	the new SGS class to receive up to 10% of the funding, with residential to receive up to
13	90%?
4	A. Because other Missouri investor owned natural gas utilities do not have the same allocation
15	requirement authorized by the Commission, the MGE EEC must examine and implement
16	residential and SGS energy efficiency programs that are limited by the allocation
17	requirement. To permit the EEC to identify and implement cost effective energy efficiency
8	programs, this 90/10 allocation should be reconsidered by the Commission.
19	Q. What other Missouri regulated natural gas utilities have energy efficiency programs authorize
20	by the Commission?
21	A. The following investor-owned natural gas utilities regulated by the Commission have
22	portfolios promoting a variety of cost-effective energy efficiency programs and initiatives for
23	Missouri Residential, Commercial, Small General Service and Industrial natural gas
24	customers:
25 26	Ameren Missouri (natural gas) The Empire District Gas Company

<sup>&</sup>lt;sup>8</sup> Missouri Public Service Commission Case No. GR-2009-0355, *In the Matter of Missouri Gas Energy and Its Tariff Filing to Implement a General Rate Increase for Natural Gas Service*; Report and Order, Effective: February 20, 2010, page 64 and page 65.

2 3		Laciede Gas Company Liberty Utilities (formerly Atmos Energy Corporation) Missouri Gas Energy
4 5	Q.	Please summarize the progress of MGE's energy efficiency efforts.
6	A.	The energy efficiency initiatives continue to make progress with MGE proposing a new
7		series of efficiency strategies for review and implementation. Following the acquisition of
8		MGE by Laclede, as authorized by the Commission in GM-2013-0254, the EEC for Laclede
9		and MGE met together twice to discuss opportunities for improving energy efficiency
10		development and delivery within the companies' respective Missouri service territories.
11		Laclede is proposing new energy efficiency initiatives for the MGE service area that match
12		the Laclede programs approved by the EEC.
13	Q.	What innovative energy efficiency programs has MGE instituted?
14	A.	Following the May 22, 2011 tornado that devastated Joplin and surrounding communities,
15		MGE instituted an innovative residential and small general service customer natural gas
16		efficiency program called the "Rebuild Joplin Program." With funding of up to \$1 million to
17		support the purchase and installation of high efficiency natural gas utilization equipment
18		including water heaters and furnaces, MGE instituted this program designed to assist tornado
19		victims, encourage rebuilding efforts, and promote energy efficiency in the tornado-impacted
20		areas.
21	Q.	Please give an example of another innovative energy efficiency project by MGE.
22	A.	Working with the MGE EEC, the Metropolitan Energy Center and Kansas City Power &
23		Light Company, MGE is providing their residential customers with a "whole-house"
24.		approach to energy efficiency with the "Home Performance with Energy Star" project.
25		Through the use of a trained and certified home energy inspector, MGE's residential

- customers can identify specific opportunities to improve the over-all efficiency of their
- 2 homes by examining building-shell components such as windows, doors and insulation as
- well as high efficiency natural gas utilization equipment. The Division of Energy supports
- 4 joint programs and encourages expansion of such cooperative efforts in energy efficiency
- 5 programs.
- 6 Q. Please summarize your testimony.
- 7 A. Significant strides have been made by investor-owned natural gas utilities, including MGE,
- 8 to successfully implement cost-effective energy efficiency programs in Missouri. These
- 9 investments should continue to be strongly supported through continued funding to ensure
- their on-going success. The DE respectfully recommends, therefore, that the Commission
- address and authorize the following:
- Approve the continuation of the Energy Efficiency Collaborative (EEC) authorized
- by the Commission in the company's last rate case GR-2009-0363 in a consensus
- capacity to help guide MGE's energy efficiency planning and implementation
- 15 process,

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- Require MGE to commit to adequately fund the energy efficiency programs
- identified by the collaborative that are determined to be cost effective;
- Reconsider the Commission requirement to allocate energy efficiency funds between
- the SGS class and the Residential class;
- Require MGE to continue to report progress to the Commission and the EEC; and
- Continue, at a minimum, the current energy efficiency initiatives administered by the
- 22 MGE with the assistance and coordination of the EEC process.

- 1 Q. Does this conclude your testimony?
- 2 A. Yes. Thank you.

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

In the Matter of the General Rate Increase Tariffs For Missouri Gas Energy, a Division of Laclede Gas Company  Case No. GR-2014-0007 )		
	AFFIDAVIT OF JOHN A. BUCHANAN	
STATE OF MISSOURI ) ) ss CITY OF JEFFERSON )		
	John A. Buchanan, of lawful age, being duly sworn on his oath, deposes and states:	
1.	My name is John A. Buchanan. I work in the City of Jefferson, Missouri, and I am employed	
	by the Missouri Department of Economic Development as Senior Planner, 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.	
	John A. Buchanan	
Su	bscribed and sworn to before me this 28th day of January, 2014	
Му	KAY A. JOHANNPETER Notary Public-Notary Seal STATE OF MISSOURI Cole County My Commission Expires: Aug. 4, 2015 Commission # 11551967  Notary Public NOTARY PUBLIC OF MISSOURI OF MISSOURI OF MISSOURI OF MISSOURI OF MISSOURI	