Exhibit No.:

Issues: CHP Outreach Initiative for Critical

Infrastructure Resiliency

Witness: Claire M. Eubanks, P.E.

Sponsoring Party: MoPSC Staff
Type of Exhibit: Rebuttal Testimony
Case No.: GR-2018-0013

Date Testimony Prepared: April 13, 2018

MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

ENGINEERING ANALYSIS SECTION

REBUTTAL TESTIMONY

OF

CLAIRE M. EUBANKS, P.E.

LIBERTY UTILITIES (MIDSTATES NATURAL GAS) CORP. d/b/a LIBERTY UTILITIES

CASE NO. GR-2018-0013

Jefferson City, Missouri **April 2018**

1	REBUTTAL TESTIMONY			
2	OF			
3	CLAIRE M. EUBANKS, P.E.			
4 5	LIBERTY UTILITIES (MIDSTATES NATURAL GAS) CORP. d/b/a LIBERTY UTILITIES			
6	CASE NO. GR-2018-0013			
7	Q. Please state your name and business address.			
8	A. Claire M. Eubanks, and my business address is Missouri Public Servi	ice		
9	Commission, P.O. Box 360, Jefferson City, Missouri, 65102.			
10	Q. By whom are you employed and in what capacity?			
11	A. I am employed by the Missouri Public Service Commission ("Commission") as	s a		
12	Utility Regulatory Engineer II in the Engineering Analysis Unit, Operational Analysis			
13	Department, Commission Staff Division.			
14	Q. Please describe your work and educational background.			
15	A. A copy of my work and educational experience is attached to this testimony	as		
16	Schedule CME-r1.			
17	Q. What is the purpose of your Rebuttal Testimony?			
18	A. The purpose of my Rebuttal Testimony is to respond to Division of Energy (D	E)		
19	witness Jane Epperson's Direct Testimony regarding an outreach initiative for Combined Heat a	nd		
20	Power (CHP) for critical infrastructure. ¹			
21	Q. What is CHP and what types of customers may be interested in CHP?			
22	A. CHP refers to technologies that simultaneously generate electricity and user	ful		
23	thermal energy from a single fuel source. Therefore, CHP may be beneficial to customers who			
24	simultaneously need power and thermal energy. A few examples of customers who may find			
	1 As proposed the pilot program would be applicable to a subset of critical infrastructure sectors			

benefit in CHP systems are hospitals, universities, data centers, and industries which require heating processes.

- Q. What is critical infrastructure?
- A. The US Patriot Act² defines critical infrastructure as:

Systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety, or any combination of those matters.

- Q. Please briefly summarize Ms. Epperson's proposal regarding an outreach initiative for CHP.
- A. Ms. Epperson recommends that the Commission authorize Liberty Midstates MO complete an outreach initiative to provide information and technical assistance to customers who may benefit from CHP technologies.³
- Q. Ms. Epperson described Empire District Electric Company's ("Empire") CHP activities; how do those activities compare to the recommended outreach initiative?
- A. The "Amended Stipulation and Agreement as to Division of Energy and Renew Missouri" filed in EM-2016-0213,⁴ includes a detailed process which describes how Empire will assist DE and USDOE CHP Technical Assistance Partnership ("CHP TAP") with an outreach effort for screening potential CHP customers within the Empire District Gas Company's service territory. The process outlined in the "Amended Stipulation and Agreement as to Division of

² USA Patriot Act of 2001, Public Law 107-56, Section 1016 (e), https://www.gpo.gov/fdsys/pkg/PLAW-107publ56/pdf/PLAW-107publ56.pdf.

³ Direct Testimony of Jane Epperson, Case no. GR-2018-0013, Page 3, lines 1-3.

⁴ Missouri Public Service Commission Case No. EM-2016-0213, *In the Matter of the Empire District Electric. Company, Liberty Utilities (Central) Co. and Liberty Sub Corp, Concerning an Agreement and Plan of Merger and Certain Related Transactions*, Amended Stipulation and Agreement as to Division of Energy and Renew Missouri, August 23, 2016, pages 2-4.

21

- Energy and Renew Missouri" is generally the same process Ms. Epperson proposed in this case for Liberty Midstates MO.⁵
- Q. What was Staff's position on the "Amended Stipulation and Agreement as to Division of Energy and Renew Missouri" in EM-2017-0213?
 - A. Staff did not oppose the stipulation and agreement but was not a signatory.
- Q. Is there an element in the "Amended Stipulation and Agreement as to Division of Energy and Renew Missouri" that is not included in Ms. Epperson's Direct Testimony?
- A. Yes. The "Amended Stipulation and Agreement as to Division of Energy and Renew Missouri" included a provision that "Any recovery of third party or non-reoccurring costs associated with the Combined Heat and Power survey will not exceed five-thousand dollars (\$5,000)."
- Q. Does Ms. Epperson consider the costs of a CHP outreach initiative in her Direct Testimony?
- A. Yes. While Ms. Epperson does not anticipate external costs associated with the outreach effort, she does anticipate Liberty Midstates MO staff time would be involved in the identification and outreach to customers.⁷
 - Q. Does Staff have any recommendations related to DE's proposed outreach initiative?
- A. Yes. Staff recommends a budget for the outreach initiative be specified as a deferral capped at \$5,000, as was the budget for Empire to assist in a CHP survey.
 - Q. Does this conclude your testimony?
 - A. Yes.

⁵ Direct Testimony of Jane Epperson, Case no. GR-2018-0013, Page 17 lines 1-20 and Page 18 lines 1-2.

⁶ Missouri Public Service Commission Case No. EM-2016-0213, *In the Matter of the Empire District Electric. Company, Liberty Utilities (Central) Co. and Liberty Sub Corp, Concerning an Agreement and Plan of Merger and Certain Related Transactions*, Amended Stipulation and Agreement as to Division of Energy and Renew Missouri, August 23, 2016, page 4.

⁷ Direct Testimony of Jane Epperson, Case no. GR-2018-0013, Page 16 lines 3-8.

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' Tariff Revisions Designed to Implement a General Rate Increase for Natural Gas Service in the Missouri Service Areas of the Company) Case No. GR-2018-0013))
AFFIDAVIT OF CLA	AIRE M. EUBANKS, PE
STATE OF MISSOURI)) ss. COUNTY OF COLE)	
	KS, PE and on her oath declares that she is of outed to the foregoing Rebuttal Testimony and o her best knowledge and belief.
Further the Affiant sayeth not.	Claric M Erbon Ko CLAIRE M. EUBANKS, PE
JU	TRAT
	y constituted and authorized Notary Public, in souri, at my office in Jefferson City, on this
D. SUZIE MANKIN Notary Public - Notary Seal State of Missourl Commissioned for Cole County My Commission Expires: December 12, 2020 Commission Number: 12412070	Desullankin Notary Public

CLAIRE M. EUBANKS, PE

PRESENT POSITION:

I am a Utility Regulatory Engineer II in the Engineering Analysis Unit, Operational Analysis Department, of the Commission Staff Division of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri – Rolla, now referred to as Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc., now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012 and was promoted to my current position in January 2017. My primary responsibilities are related to the Renewable Energy Standard. I have also served on work groups related to the Clean Power Plan and Ameren Missouri's Standby Service Rider.

CASE HISTORY:

Case Number	Utility	Туре	Issue
EA-2012-0281	Ameren	Rebuttal	Certificate of Convenience and Necessity
EC-2013-0379 EC-2013-0380	KCP&L KCP&L GMO	Rebuttal	RES Compliance
EO-2013-0458	Empire	Memorandum	RES Compliance Plan & Report
EO-2013-0462	Ameren	Memorandum	RES Compliance Report
EO-2013-0503	Ameren	Memorandum	RES Compliance Plan
EO-2013-0504	KCPL	Memorandum	RES Compliance Plan & Report
EO-2013-0505	GMO	Memorandum	RES Compliance Plan & Report
ET-2014-0059	KCP&L GMO	Rebuttal	RES Retail Rate Impact
ET-2014-0071	KCP&L	Rebuttal	RES Retail Rate Impact
ET-2014-0085	Ameren	Rebuttal	RES Retail Rate Impact
ER-2014-0258	Ameren	Cost of Service Report, Surrebuttal	RES, In-Service

cont'd Claire M. Eubanks, PE

Case Number	Utility	Туре	Issue
EO-2014-0151	KCP&L GMO	Memorandum	RESRAM
EO-2014-0357	Electric	Memorandum	Solar Rebates Payments
EO-2014-0287	KCPL	Memorandum	RES Compliance Plan
EO-2014-0288	GMO	Memorandum	RES Compliance Plan
EO-2014-0289	KCPL	Memorandum	RES Compliance Report
EO-2014-0290	GMO	Memorandum	RES Compliance Plan
ER-2014-0370	KCP&L	Cost of Service Report	RES
EX-2014-0352	N/A	Live Comments	RES rulemaking
EC-2015-0155	GMO	Memorandum	Solar Rebate Complaint
EO-2015-0260	Empire	Memorandum	RES Compliance Plan & Report
EO-2015-0263	KCPL	Memorandum	RES Compliance Report
EO-2015-0264	GMO	Memorandum	RES Compliance Report
EO-2015-0265	KCPL	Memorandum	RES Compliance Plan
EO-2015-0266	GMO	Memorandum	RES Compliance Plan
EO-2015-0267	Ameren	Memorandum	RES Compliance Plan & Report
EO-2015-0252	GMO	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EO-2015-0254	KCPL	Staff Report	Integrated Resource Plan – Renewable Energy Standard
EA-2015-0256	KCP&L GMO	Live Testimony	Greenwood Solar CCN
EO-2015-0279	Empire	Memorandum	RES Compliance Plan & Report
ET-2016-0185	KCP&L	Memorandum	Solar Rebate Tariff Suspension
EO-2016-0280	KCPL	Memorandum	RES Compliance Report
EO-2016-0281	GMO	Memorandum	RES Compliance Report
EO-2016-0282	KCPL	Memorandum	RES Compliance Plan
EO-2016-0283	GMO	Memorandum	RES Compliance Plan
EO-2016-0284	Ameren	Memorandum	RES Compliance Plan & Report
ER-2016-0023	Empire	Report	RES
ER-2016-0156	KCP&L GMO	Rebuttal	RESRAM Prudence Review

cont'd Claire M. Eubanks, PE

Case Number	Utility	Туре	Issue
EA-2016-0208	Ameren	Rebuttal	Certificate of Convenience and Necessity
ER-2016-0285	KCPL	Cost of Service Report	In-Service, Greenwood Solar
ER-2016-0179	Ameren	Rebuttal	In-Service, Labadie Landfill
EW-2017-0245	Electric	Report	Working Case on Emerging Issues in Utility Regulation
EO-2017-0268	Ameren	Memorandum	RES Compliance Plan & Report
EO-2017-0269	KCPL	Memorandum	RES Compliance Report
EO-2017-0271	KCPL	Memorandum	RES Compliance Plan
GR-2017-0215 & GR-2017-0216	Spire	Rebuttal & Surrebuttal	CHP for Critical Infrastructure