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MISSOURI PUBLIC SERVICE COMMISSION FILE NO. ER-2014-0258

REBUTTAL TESTIMONY

OF

GREGORY W. LOVETT

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

> St. Louis, Missouri January 2015

> > Date3-12-15 Reporter 4F
> > File No. F2-2014-0258

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3	GREGORY W. LOVETT
4	FILE NO. ER-2014-0258
5	I. Introduction
6	Q. Please state your name and business address.
7	A. Gregory W. Lovett, Ameren Missouri, One Ameren Plaza, 1901 Choutea
8	Avenue, St. Louis, Missouri 63103.
9	Q. By whom are you employed and in what position?
10	A. I am employed by Union Electric Company d/b/a Ameren Missou
11	("Ameren Missouri" or "Company") as Manager of Energy Efficiency.
12	Q. Please describe your educational background, work experience an
13	the duties of your position.
14	A. I joined Central Illinois Public Service Company ("CIPS") as
15	Distribution Engineer in Quincy, Illinois in 1981 and held several positions is
16	Springfield, Illinois prior to the merger of CIPS and Union Electric Company ("UE") is
17	1998, when I was Business Improvement Consultant. After the merger, I became Senio
18	Engineer of Metering for Ameren Missouri, then known as AmerenUE. After holding
19	several positions in St. Louis, I was promoted to my current position with Amere
20	Missouri. I have a Bachelor of Science Degree in Electrical Engineering from the
21	University of Illinois and a Master of Business Administration from Webster University
22	As Manager of Energy Efficiency in the Energy Efficiency and Renewable Energ

- 1 Department, I oversee the operations of the Ameren Missouri Evaluation, Measurement
- 2 and Verification projects for the energy efficiency programs.
- 3 II. Purpose and Scope
- 4 Q. What is the purpose of your rebuttal testimony in this proceeding?
- 5 A. The purpose of my rebuttal testimony is to respond to the testimony of
- 6 John Buchanan on behalf of the Missouri Department of Economic Development
- 7 Division of Energy ("DE"). Specifically, I am responding to Mr. Buchanan's request to
- 8 discontinue biennial evaluations following the "second" evaluation for the Ameren
- 9 Missouri Low Income Weatherization Program scheduled for completion on July 31,
- 10 2015, and the associated tariff change. In addition, I am addressing the Low Income
- Weatherization portion of Staff's Revenue Requirement Cost of Service Report¹
- 12 ("Report") prepared by Dr. Henry Warren of the Missouri Public Service Commission
- 13 Staff ("Staff").
- 14 III. Response to Recommendations of Staff
- 15 Q. Staff offers four recommendations with respect to the Low Income
- 16 Weatherization Program administered by DE. Do you agree with those
- 17 recommendations?
- A. To paraphrase, Dr. Warren offers the following recommendations:
- 19 1. Prior utilized funds remain in the Missouri State Environmental
- 20 Improvement and Energy Resource Authority ("EIERA") account for future
- 21 weatherization use.

¹ Staff Report, Revenue Requirement, Cost of Service, Case No. ER-2014-0258, December 5, 2014, p. 138-141.

1	2. Ameren Missouri continue to include \$1.2 million in rates to
2	weatherize homes annually, with \$60,000 being set aside to pay for program evaluation.
3	3. The second evaluation of the program should include the impact of
4	weatherization with respect to gas service for Ameren Missouri combined gas-electric
5	service; and
6	4. Continue evaluations, but do so on a 5-year rather than 2-year
7	basis.
8	Ameren Missouri does not object outright to these recommendations, with the
9	exception of the fourth one. Ameren Missouri does wish to confer with Staff concerning
10	the intent behind the recommendations, particularly No. 3, but has no objection to the
11	principle of considering the benefits for customers who also receive gas utility service
12	(not necessarily confined to Ameren Missouri gas customers).
13	Q. Why should the biennial evaluations continue for the Low Income
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14	
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1 Low Income Weatherization Program funds to hire an 2 Evaluation, Measurement and Verification (EM & V) 3 contractor for future evaluations. The cost of the 4 evaluation will not exceed \$120,000 unless the Stakeholder 5 Group determines otherwise. Any withheld funds that are 6 in excess of amounts needed for future evaluations shall be 7 used to provide low income weatherization services; such amount shall be included in the following year's 8 9 weatherization fund payment after the evaluation is 10 completed. If additional funds are expected to be needed to perform the second evaluation, the Stakeholder Group may 11 12 request Ameren Missouri Gas or Laclede to supplement the 13 funds provided by Ameren Missouri electric to hire the 14 EM & V contractor. This agreement does not obligate Ameren Missouri Gas or Laclede to provide supplemental 15 16 funds, and any such provision of supplemental funding by 17 either entity would be entirely at the discretion of that 18 entity. 19 Q. Does Dr. Warren agree with continuing the evaluations of the Low 20 Income Weatherization program as described above? 21 No. He agrees with the funding of evaluations, but would like to move the A. 22 evaluation to a 5-year rather than a 2-year cycle. On page 138 of the Report, Dr. Warren 23 states: 24 2) That Ameren Missouri continue to collect \$1.2 million in 25 rates annually, of which \$1.14 million will be for low-26 income weatherization as currently allocated between the Weatherization Agencies, and \$60,000 allocated annually 27 28 to the biennial evaluation of the low-income weatherization 29 program if determined by the Ameren Missouri 30 stakeholders to be appropriate; And he continues on page 139: 31 32 4) That the timing of any evaluation subsequent to the 33 second biennial evaluation should be at the discretion of the 34 Company in consultation with the stakeholder group, but 35 not less often than every five years.

1	Q. What is the purpose of conducting future evaluations?	
2	A. The S&A clearly spells out the purpose of the evaluations. Paragra	aph 2
3	states:	
4 5 6 7 8 9	This evaluation will estimate both the electric and natural gas savings realized by Ameren Missouri electric customers who use natural gas supplied by either Ameren Missouri or Laclede for space heating. It will also include an evaluation of the effect of weatherization on participants' ability to pay gas and electric bills and on the customers' arrearages.	
0	In addition, paragraph 3 includes the cost effectiveness component, as follow	s:
11	The second evaluation will include an assessment of cost effectiveness.	
13	While I agree that program evaluation funding is important, it is for the pu	rpose
14	of obtaining useful and routine evaluations of the program. Accordingly, I disagree	with
15	Staff's recommendation to discontinue biennial evaluations in favor of a 5	-year
16	evaluation. For evaluations to be meaningful, there must be a reasonable interval v	vithin
17	which the recommendations can be incorporated into the program. Five years is si	mply
8	too long, and diminishes the value of performing evaluations in the first place. Prob	olems
19	with the program would remain for five full years, and continuous improvements co	annot
20	be made to refine the program to meet participant needs and achieve energy sav	ings.
21	Continuing the biennial evaluation will ensure customer funds are being utilized in	n the
22	most appropriate way and checks and balances are in place to monitor the program	n and
23	improve the energy savings results. This is not possible without on-going evaluation	s.
24	Q. Have past evaluations of this program provided information to	meet
25	these requirements?	
26	A. Yes. The evaluation process for this program has evolved and improved and improved the second of	roved
2.7	over the last few years. The third evaluation is just starting and with the input from	n the

- regulatory stakeholder group, twelve evaluation objectives will be addressed by the third-
- 2 party evaluator. Of these twelve objectives, eight are new, which will provide the
- 3 Company, DE and other stakeholders with valuable information to improve the program
- 4 process and impact results to better utilize customers funds. After working with DE to
- 5 implement appropriate changes, on-going evaluations will be needed to analyze and
- 6 document the benefits and identify opportunities for future improvements.
- 7 Q. When was the Low Income Weatherization Program first evaluated?
- 8 A. I was part of the regulatory stakeholder group that agreed to complete the
- 9 first evaluation of the Low Income Weatherization program. It was completed by
- 10 Apprise in December 2009 ("Apprise Evaluation").
- 11 Q. Did the Apprise Evaluation make any recommendations to improve
- 12 the program?
- 13 A. Yes. The Apprise Evaluation included fourteen recommendations in four
- 14 areas: program management, weatherization staff training, impact and satisfaction.
- O. Has DE fully implemented all of these improvements?
- A. No, according to the 2012 evaluation conducted by The Cadmus Group
- 17 ("Cadmus Evaluation"), several of the Apprise Evaluation recommendations have not
- been fully implemented. One of the Cadmus Evaluation recommendations included in
- 19 the Apprise Evaluation is a concern to the evaluation of the Program is the tracking
- database.
- 21 While DE did develop a new Missouri weather assistance program database, data
- 22 collected in it is so limited that the ability to conduct the most recent evaluation was
- 23 negatively impacted.

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Q. What problems were caused by the fact that the database was not fully implemented?

3 A. While DE did secure a new database system as recommended in the 4 Apprise Evaluation, measure level detail was not collected and recorded in the new 5 database system. The lack of this data negatively impacted the 2012 evaluation to the 6 extent that the scope of the Cadmus Evaluation needed to be reduced from the original 7 evaluation plan. Cadmus anticipated having specific data on measures that were installed 8 at each participant's home, similar to the level of detail they see in the databases for other 9 Ameren Missouri energy efficiency programs. When Cadmus learned that the anticipated 10 level of detail was not available, they had to eliminate their plan to develop measure level savings and Total Resource Cost ("TRC") results. This significantly reduced the quality 11 12 of the impact results, because the cost effectiveness of individual measures could not be 13 determined. This is particularly concerning given the fact that the low income program is 14 only evaluated every two years rather than annually. With good data, improvements can 15 be identified, and if followed, higher energy savings can be achieved.

Q. Did Cadmus make other recommendations in its evaluation report that were similar to the recommendations found in the Apprise Evaluation?

- 18 A. Yes. Cadmus made a total of seven recommendations and the following 19 recommendations are similar to the 2009 Apprise Evaluation recommendations:
- Increasing Ameren Missouri sponsorship awareness through leave-behind
 materials;
- Developing Ameren Missouri-specific Low Income Weatherization

 Program funding guidelines that complement the existing federal

1		guidelines and allow CAAs to more comprehensively serve participants,
2		thereby achieving greater savings;
3	•	Collaboratively assessing the potential addition of new electric measures;
4	•	Tracking and electronically reporting measure-specific details for all
5		participants;
6	•	Tracking and electronically reporting previously inoperable heating or
7		cooling units, as well as those that were replaced rather than tuned-up.
8	Q.	Does Ameren Missouri agree with these recommendations?
9	A.	Yes, it does. Ameren Missouri developed educational energy efficiency
10	program mate	erials for customers and would like to work with DE to evaluate potential
1	electric measu	ares that may be included in the Low Income Weatherization Program in the
12	future. Ame	ren Missouri also supports the recommendation for improvements to the
13	database to as	sist in future evaluation efforts.
14	Q.	Were there any other results in that evaluation report that you would
15	like to discus	s?
16	A.	Yes. Other results included:
17	•	Participants in the program saw an average energy savings of 12%;
18	6	The average number of disconnects for participants in the program
19		declined by 133%.
20	This t	ype of information is needed to show the evaluated results and benefits of
21	the program.	

1	Q.	What is the status of the second evaluation identified in the S&A?
2	A.	After extensive input with the regulatory stakeholder group, Ameren
3	Missouri issu	ned a Request for Proposals on October 31, 2014 and subsequently received
4	eight bids.	Ameren Missouri is currently negotiating with the selected bidder on the
5	Statement of	Work and expects work to begin on the evaluation in January and have a
6	final report b	y July 31, 2015, in accordance with the S&A.
7	Q.	Does Ameren Missouri expect to learn anything new in this evaluation
8	or is this sim	aply a repeat of previous evaluations?
9	A.	Yes, we do expect to receive new information with this evaluation. In
10	addition to the	ne previous evaluation process, cost effectiveness and billing analysis, there
11	are several ne	ew objectives to the current evaluation which are:
12	•	The evaluator will receive billing data and avoided costs from Laclede
13		Gas Company, allowing a more comprehensive cost effective analysis and
14		customer bill payment analysis since many of the measures included in the
15		Low Income Weatherization Program are building shell measures that
16		save both electricity and gas;
17	•	The evaluator will be able to conduct a measure level analysis by
18		accessing data directly from the NEAT audit tool used by the Community
19		Action Agencies;
20	6	The evaluator will compare the traditional utility cost effectiveness results
21		to the Savings to Investment Ratio ("SIR") used by the audit tool and
22		explain the differences;

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- The evaluator will examine the split between gas and electric spending and determine if this split is appropriate based upon program savings;
- The evaluator will discuss the non-energy benefits of the program;
- The evaluator will elicit feedback from sub-grantees on program design;
- The evaluator will receive comments from the regulatory stakeholders prior to issuing the final report.
- Q. Are the previous issues experienced with the database expected to be an issue for this evaluation?
- A. Yes, the current status of the database is expected to be an issue. DE has expressed to Ameren Missouri that no changes have been made to the database as a result of the last evaluation. The only recent upgrade has been to attach the audit reports as a pdf file attachment in the database, but this enhancement was already being developed when Cadmus evaluated the program.
 - Q. Does the pdf attachment of the audit reports provide any benefit for future evaluations?
 - A. It could provide some benefit as it allows the evaluator to review a sample of audit reports. However, this enhancement is not sufficient to allow evaluators to query the database to get the level of detail they need to conduct a measure level analysis of savings and cost effectiveness. In order to do this, they would need to manually enter the data from audit reports into a separate database or spreadsheet for analysis, a time consuming and expensive option. That is why the proposed evaluator has suggested going to the Community Action Agencies to gain access to their audit tool.

1 O. Do low income programs have the same cost effectiveness 2 requirements as other energy efficiency programs undertaken pursuant to the 3 Missouri Energy Efficiency Investment Act ("MEEIA")? 4 A. No, they do not. While this program is not a MEEIA program, the 5 MEEIA program offers a point of comparison. Low Income Weatherization programs do 6 not have the same requirement to be cost effective as other energy efficiency programs 7 such as MEEIA, and I am not advocating the DE Weatherization Program be required to 8 meet strict cost-effectiveness tests. Nonetheless, they should be developed to be as cost 9 effective as possible, and evaluations can help achieve this end. 10 Even without requirements for cost effectiveness, Ameren Missouri believes its 11 customers' money should still be spent in an effort to get the most savings for customers. 12 There is a vast difference between a program that has a non-cost-effective TRC of .8 to .9 13 and one that has a TRC of .1 to .2. To continue running a program with an extremely low 14 TRC without attempting to make program improvements would not be advisable. 15 Q. Are there any other reasons to calculate cost effectiveness? 16 Yes, if the cost effectiveness of specific measures can be determined, the A. 17 best mix of measures can be determined. There is a limited amount of funds that can be 18 spent on each home, so it makes sense to spend those funds on the measures most 19 beneficial to the homeowner. 20 Q. You mentioned one of the new evaluation objectives is that the 21 evaluator will compare the traditional utility cost effectiveness results to the SIR

used by the audit tool. How is this cost effectiveness test different?

A. The Saving to Investment Ratio is the ratio of the present value of an energy saving stream with respect to the present value of the cost of making the energy efficiency improvements. According to the U.S. Department of Energy explanation of the audit tools, the SIRs are calculated using fuel costs and installation costs representative of the home and agency. This means they are the retail rates the customer pays, whereas the energy savings stream of the TRC is based upon the utility's avoided cost, which is typically lower than retail rates. The SIR also does not include the administrative cost of running the program, while the TRC includes all costs. A measure can pass the SIR, but not pass the TRC test.

IV. Response to DE

Q. Do you agree with Mr. Buchanan's assessment that evaluations of the Low Income Weatherization Program should be discontinued after the July 31, 2015 evaluation?

A. No, I do not. Mr. Buchanan's main argument is that the funds used to pay for the evaluation could have been used to pay for weatherization of more homes. The \$60,000 annually set aside for evaluation would translate to eighteen additional homes based upon an average cost per home of \$3,196.77 from the Low Income Weatherization 2014 third quarter report provided by DE at the most recent stakeholder meeting. Mr. Buchanan states on page 10 of his testimony that the average cost of a home being weatherized is only \$2,000 rather than the \$3,196.77 in the DE 2013 third quarter report. Mr. Buchanan inflates the number of homes that could be weatherized with the avoided evaluation funds. If recommendations from the evaluation are implemented, the homes that are weatherized could potentially receive more savings than they would have

- 1 received without periodic evaluations. In addition, Ameren Missouri will release any
- 2 funds collected for evaluation that are not spent back to DE to weatherize low income
- 3 homes. This amount is expected to be approximately \$24,000 in 2015, which will
- 4 weatherize seven additional homes.

Does Mr. Buchanan give any other reasons why future evaluations of

6 the Low Income Weatherization Program should be discontinued?

A. Yes. Mr. Buchanan states that biennial evaluations do not give DE enough time to implement changes. I disagree. Ameren Missouri implements its MEEIA programs on a 3-year cycle with an annual evaluation. Ameren Missouri and its implementers make program design changes on at least an annual basis and occasionally more often, as conditions warrant. There is no reason why DE cannot implement changes within a 2-year period. Important changes that were recommended as far back as 2009 have still not been implemented. In contrast to Mr. Buchanan's recommendation to terminate evaluations of the programs, I would recommend that adherence to evaluation recommendations be monitored and the implementation of those recommendations be considered in future rate cases, when this program and its funding are at issue.

Q. What was Mr. Buchanan's final reason for discontinuing evaluations?

A. Mr. Buchanan states that the biennial evaluation addresses only one of four utility funded weatherization programs administered by DE. While this is true, unless DE is willing to commit to a thorough evaluation of the entire low income weatherization process in Missouri, the best and most appropriate thing Ameren Missouri can do is to evaluate the program that is funded by its customers. The Company has committed substantial funding to this program over the last several years, and the

- 1 associated expenses have been included in rates paid by customers. The 2015 evaluation
- 2 will attempt to include all funding sources and all energy savings, including gas and
- 3 electric, for those homes served by Ameren Missouri electricity that receive
- 4 weatherization through the program. In addition, Ameren Missouri has received a
- 5 commitment from one of the other utilities, Laclede Gas Company, which has been
- 6 participating in the current evaluation design calls, to provide the data needed to analyze
- 7 gas savings.
- 8 Q. Why do you believe this program should continue to be evaluated
- 9 periodically?
- 10 A. The evaluation that is expected to be completed by July 31, 2015 will be
- the most in-depth evaluation completed to date. As such, it can be expected to have more
- detailed recommendations to improve the program. If DE implements at least some of
- those recommendations, it will be beneficial to conduct a future evaluation to determine
- 14 the impact of those changes on the program. Ameren Missouri, its customers, and the
- 15 participants in the weatherization program all have a shared interest in improving
- 16 effectiveness of the money spent to administer this program. We cannot achieve that end,
- 17 however, if we do not evaluate the performance of the program at some reasonable
- 18 interval.
- 19 Q. How often do you believe evaluations should be conducted?
- A. The current schedule of every two years is appropriate. This gives DE and
- 21 Community Action Agencies sufficient time to implement recommended changes before
- the next evaluation to determine the effectiveness of these changes. As previously stated,

Rebuttal Testimony of Gregory W. Lovett

- 1 Ameren Missouri's MEEIA programs are evaluated and program improvements are
- 2 implemented every year.
- Q. Do you agree with Mr. Buchanan that tariff sheet 175 needs to be
- 4 updated?
- 5 A. Yes, with respect to changing the name of Missouri Department of Natural
- 6 Resources to Division of Energy in paragraph 1 and updating the date of the next
- 7 evaluation, but I do not agree with removing paragraph 5 which describes the evaluation
- 8 process.
- 9 Q. Does this conclude your rebuttal testimony?
- 10 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

n the Matter of Union Electric Company l/b/a Ameren Missouri's Tariffs to ncrease Its Revenues for Electric Service. Case No. ER-2014-0258
AFFIDAVIT OF GREGORY W. LOVETT
STATE OF MISSOURI)) ss
CITY OF ST. LOUIS)
Gregory W. Lovett, being first duly sworn on his oath, states:
1. My name is Gregory W. Lovett. I work in the City of St. Louis,
Missouri, and I am employed by Union Electric Company d/b/a Ameren Missouri as
Manager, Energy Efficiency.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal
Testimony on behalf of Union Electric Company d/b/a Ameren Missouri consisting of
pages, and Schedule(s) N/A, all of which have been
prepared in written form for introduction into evidence in the above-referenced docket.
3. I hereby swear and affirm that my answers contained in the attached
estimony to the questions therein propounded are true and correct.
Je Mi Kom
Gregory W. Lovett
Subscribed and sworn to before me this 16th day of January, 2015. Beckie J. Eaves
Beckie J. Eaves
Notary Public My commission expires:
BECKIE J. EAVES Notary Public - Notary Seal State of Missouri Commissioned for St. Louis City My Commission Expires: February 21, 2018 Commission Number: 14938572