Exhibit No.:

Issue(s): Energy Efficiency Cost Recovery

Witness: Daniel G. Laurent

Sponsoring Party: Union Electric Company
Type of Exhibit: Rebuttal Testimony

Case No.: ER-2011-0028

Date Testimony Prepared: March 25, 2011

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2011-0028

REBUTTAL TESTIMONY

OF

DANIEL G. LAURENT

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a Ameren Missouri

> St. Louis, Missouri March, 2011

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1	REBUTTAL TESTIMONY
2	OF
3	DANIEL G. LAURENT
4	
5	CASE NO. ER-2011-0028
6	
7	I. <u>INTRODUCTION</u>
8	Q. Please state your name and business address.
9	A. My name is Daniel G. Laurent, and my business address is One Ameren
10	Plaza, 1901 Chouteau Avenue, St. Louis, Missouri.
11	Q. By whom and in what capacity are you employed?
12	A. I am Manager, Energy Efficiency and Demand Response for Union
13	Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company").
14	Q. Please describe your educational background and employment
15	experience.
16	A. I joined Central Illinois Public Service Company ("CIPS") as
17	Meter/Distribution Engineer in June of 1988 and held several positions in engineering,
18	customer service and marketing before being promoted to the Marketing Manager prior
19	to the merger of CIPS and Union Electric Company in 1998. After the merger, I was
20	named Manager, Pricing and Contract Administration for Ameren Services. After
21	holding Manager positions in Marketing, Business Development and Regulatory
22	Compliance, I was promoted to my current position within Ameren Missouri. I have a
23	Bachelor of Science Degree in Electrical Engineering from the University of Illinois and
24	a Master of Business Administration from Webster University.

II.

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2	Q.	What is the purpose of your testimony in this proceeding?
3	A.	Ameren Missouri recognizes the benefits of utility-sponsored energy
4	efficiency 1	programs and has successfully developed and implemented cost-effective
5	programs fo	or the benefit of our residential and non-residential customers.
6	The	purpose of my testimony is to respond to direct testimony submitted by other
7	parties in t	his case as it relates to energy efficiency. I will specifically respond to
8	testimony re	egarding:
9	(1) Success of the Ameren Missouri's energy efficiency programs;
10	(2) Recovery of the Residential Lighting and Appliance energy efficiency
11	program cos	ets; and
12	(3) Low Income Weatherization Funds.
13	Q.	Which testimony and parties are you referring to in your prior
14	answer?	
15	A.	I am referring to the portions of the Staff Report Revenue Requirement
16	Cost of Sea	rvice ("Staff Report") contributed by Staff witnesses John A. Rogers and
17	Henry E. W	arren. I am also referring to the direct testimony submitted in this case from
18	Missouri D	epartment of Natural Resources Division of Energy ("DNR") witness Laura
19	Wolfe.	
20	Q.	Did the Office of Public Counsel ("OPC") submit direct testimony on
21	energy effic	ciency?
22	A.	No, to date, they have not.

PURPOSE AND SUMMARY OF TESTIMONY

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1 2 3	III. <u>SUCCESS OF AMEREN MISSOURI'S ENERGY</u> <u>EFFICIENCY PROGRAMS</u>
4	Q. Ms. Wolfe characterized program savings as declining from 2009 to
5	2010 as reflected in her Schedule LAW-Direct-3. Do you agree with this
6	assessment?
7	A. No, there was a misunderstanding about the data which Ms. Wolfe used to
8	create Schedule LAW-Direct-3. The numbers shown are correct, however they are
9	program year values, not calendar year values. The correct estimated data through
10	February 2011 is shown in Schedule DGL-ER1. As of February 28, 2011, the Company
11	achieved 61% of the three-year MWh goal for the residential portfolio, and spent 50% of
12	the three-year projected budget. For the business portfolio, the Company achieved 53%
13	of the three-year MWh goal and spent 39% of the three-year projected budget. Ameren
14	Missouri is on track to achieve the 2008 Integrated Resource Plan ("IRP") energy
15	efficiency MWh goals by the end of 2011 within the three-year IRP projected budget.
16	Q. In the Staff Report, Mr. Rogers states that Ameren Missouri has not
17	implemented all of the programs planned in the 2008 IRP. How do you respond to
18	that?
19	A. While Mr. Rogers is technically correct, the Commission should not be
20	concerned by this fact. The Integrated Resource Plan outlines a cost effective strategy to
21	implement energy efficiency programs at a particular point in time. By the time the IRP
22	planning process has been initiated and completed, energy efficiency program
23	implementers have been hired, and the utility begins to implement programs, more than
24	two years may have passed since the initial energy efficiency program plan was

developed for the IRP. In addition, the program implementers and evaluators often

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1 provide valuable input to the portfolio and program design due to their experience in

implementing programs. Review of evaluation reports and assessment of current market

conditions also contribute to dynamic program designs.

4 The time lag between the initial program design and ultimate implementation can

5 often lead to constructive changes to initial program plans. As Ms. Wolfe acknowledged

in her direct testimony, "The IRP is based on what is known at the time of the study. It is

7 not uncommon, however, in the course of designing, implementing and administering

DSM programs that a utility learns of other DSM opportunities that may not have been

9 considered before."¹

Ms. Wolfe also notes that "Ameren Missouri has also shown a willingness to seek out alternative program designs and target customers in order to achieve success." This has been demonstrated by Ameren Missouri's successful implementation of the Appliance Recycling, Multi-Family Income Qualified and Social Marketing Distribution programs which were not included in the 2008 IRP.

Ameren Missouri is committed to implementing cost-effective programs that achieve the MWh savings within the projected budget outlined in the 2008 IRP, not to implement the exact programs originally outlined in the IRP. The program design should be dynamic, not static, and keep current with changing market conditions.

¹ Direct testimony of Laura Wolfe, p. 8, l. 5-8.

² <u>Id.</u> p. 18-19.

1 2 2	IV. RECOVERY OF LIGHTING AND APPLIANCE PROGRAM COSTS
3 4	Q. Do you agree with Mr. Rogers that the costs of the Lighting and
5	Appliance Program should be deferred until after an evaluation has been
6	completed?
7	A. No. The costs of the Lighting and Appliance program incurred to date
8	should be included in rates. Delaying the recovery of these costs further increases
9	regulatory lag and provides a strong disincentive for Ameren Missouri, or any utility, to
10	pursue energy efficiency programs. Staff's position on this issue is tantamount to
11	assuming imprudence of utility energy efficiency program investments until proven
12	otherwise.
13	Ameren Missouri tracks program progress through detailed reporting received on
14	a monthly basis from Applied Proactive Technologies ("APT"), the Lighting and
15	Appliance program implementer. In addition to the monthly report, Ameren Missouri
16	holds weekly meetings with APT program and implementation staff to discuss program
17	status and opportunities.
18	Data from the tracking system is used to calculate the estimated monthly energy
19	savings which is reported and discussed at our quarterly Regulatory Stakeholder
20	Meetings, with the Staff, DNR, OPC and other stakeholders, in the format shown in
21	Schedule DGL-ER1.
22	Q. Has the Lighting and Appliance Program been successful?
23	A. Yes. The reports we've provided to the stakeholder group to date indicate
24	the Lighting and Appliance Program is on target to exceed the program goals outlined in
25	the 2008 IRP.

Q. Do you agree with Staff's assertion that the Lighting and Appliance program benefits are very difficult to measure?

A. No, the Company does not share their concern. The Company hired an independent, third party contractor, The Cadmus Group ("Cadmus"), to evaluate our portfolio of residential energy efficiency programs. Cadmus has national experience evaluating similar programs and has developed a robust approach that is being utilized by several utilities in numerous states throughout the country. Cadmus has expressed no concerns pertaining to the accurate evaluation of the Lighting and Appliance program and has explained their evaluation approach to the regulatory stakeholders on multiple occasions.

It is useful to remember the purpose of evaluation. Evaluation will verify that the program savings are what was expected, or make adjustments, up or down, as necessary. Evaluation doesn't eliminate the need for deemed savings values or engineering estimates for program tracking prior to evaluation. These estimates are valid methods to report program progress, and evaluation is used to provide a true-up at the end of a program cycle. Evaluation is also used to recommend process improvements.

Ameren Missouri initiated a "best practice" energy efficiency program evaluation process. Evaluators were hired early in the program implementation cycle and were asked to review and comment on estimated savings values, review databases to determine if the necessary data was being tracked, perform site visits throughout the program year, and suggest program improvements whenever concerns arise. Ameren Missouri conducts weekly calls with the evaluators to discuss program and evaluation progress. Instead of the historical model where an evaluator reviews a program after the three-year program

- 1 cycle has been completed, Ameren Missouri's evaluation contractors have been
- 2 providing continuous evaluation services. As a result, the Company would not expect
- 3 any major surprises upon completion of the annual evaluation report as we would have
- 4 already been apprised of any concerns that evaluators might have with a particular
- 5 program.
- 6 Q. Has Ameren Missouri received the Program Year 2 Lighting and
- 7 Appliance program evaluation results?
- 8 A. Yes. Ameren Missouri has received the evaluation report completed by
- 9 Cadmus and has provided this report to the regulatory stakeholders.
- The program's evaluated results exceeded its goals for energy savings. The
- 11 results of an hours of use study in the Company's territory indicate customers use
- 12 compact fluorescent lights ("CFLs") an average of 2.91 hours per day, considerably
- higher than the conservative estimate of 2.34 hours used by APT to estimate energy
- savings. The Net-to-Gross Ratio of the lighting portion of the program is 96%, much
- higher than the conservative 80% that was used to estimate savings.
- According to the evaluation, retailers reported the program has been successful in
- increasing the supply of energy efficient CFLs and appliances in the market and most
- retailers report significant increases in their sales due to the program.
- 19 The Company recalculated the Lighting and Appliance program Total Resource
- 20 Cost ("TRC") test based upon the Cadmus evaluation results and found the revised
- 21 program TRC to be 2.63. Programs passing the TRC test (that is, having a benefit to cost
- ratio greater than 1.0) result in a decrease in the total cost of energy services to all electric
- 23 ratepayers.

Based on the evaluation results, the Lighting and Appliance Program has proved 1 2 to be very successful, is cost effective and is appreciated by and beneficial to Ameren 3 Missouri's customers. The costs of the Lighting and Appliance program incurred to date 4 should be included in rates. 5 V. LOW INCOME WEATHERIZATION 6 Q. Do you agree with Ms. Wolfe and Mr. Warren that funding of Low 7 Income Weatherization should continue at a level of \$1.2 million per year? 8 A. Yes. However, Ameren Missouri believes the program should have more 9 transparent reporting and that the program should be evaluated similar to other energy 10 efficiency programs funded by customers. 11 Ameren Missouri recommends that the DNR provide quarterly reporting at the 12 regulatory stakeholder update meetings to show the estimated electric energy savings at 13 customer homes and the associated costs resulting from this program. Ameren Missouri 14 recommends that a portion of the funds be spent on an independent third party evaluation 15 of the program as the last evaluation included the period 4/1/06 through 10/31/08. The 16 \$1.2 million per year should not be spent on gas measures or on Missouri residents that 17 are not Ameren Missouri electric customers. 18 VI. SUMMARY OF TESTIMONY AND CONCLUSIONS 19 Q. Please summarize your testimony and conclusions. 20 A. As I have stated above, Ameren Missouri recognizes the benefits of 21 utility-sponsored energy efficiency programs and has developed and implemented cost-22 effective programs for the benefit of our customers. Ameren Missouri is currently 23 running successful residential and non-residential energy efficiency programs, including

Rebuttal Testimony of Daniel G. Laurent

- 1 the Residential Lighting and Appliance Program, and the costs of all of the programs
- 2 should be included in rates. Ameren Missouri is on track to meet the energy efficiency
- 3 savings goals within the projected budget as established in the 2008 IRP.
- 4 Ameren Missouri supports the funding of the Low Income Weatherization
- 5 Program through the Department of Natural Resources, but feels that program should be
- 6 subject to the same level of transparent reporting and evaluation as other programs
- 7 funded by customers.
- 8 Q. Does this conclude your rebuttal testimony?
- 9 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	Case No. ER-2011-0028
AFFIDAVIT OF DANI	EL G. LAURENT
STATE OF MISSOURI) ss	
CITY OF ST. LOUIS)	
Daniel G. Laurent, being first duly sworn on his	oath, states:
1. My name is Daniel G. Laurent. 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 and Demand Response.	
2. Attached hereto and made a part	hereof for all purposes is my Rebuttal
Testimony on behalf of Ameren Missouri consis	ting of 9 pages, and Schedule DGL-
ER1, 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	y answers contained in the attached
testimony to the questions therein propounded a	re true and correct.
Danie	Maniel G. Laurent
Subscribed and sworn to before me this <u>25</u> da	y of March, 2011.
	ande Tesdall
	Notary Public
My commission expires:	
We will be a second of the sec	Amanda Tesdall - Notary Public Notary Seal, State of Missouri - St. Louis County Commission #07158967 My Commission Expires 7/29/2011

Ameren Missouri Demand-Side Resources Performance Summary Report

Implementation Date				Cu Year 1	Cumulative MWh Year 1 Year 2		Year 1	umulative MW Year 2	Year 3	Cumulative Program Costs (\$000) Year 1 Year 2 Year 3			Cost Effectiv	UCT
IRP Expected	3/2/09	ENERGY STAR Homes Program	IRP Actual	0	0	154	0.0	0.0 0.0	-	\$ - : \$ -	\$ 129 \$ \$ - \$		1.00	1.18
Actual			Variance	0	0	(154)	0.0	0	(0)	Ψ .	, ,		(1.00)	(1.18
IRP Expected	10/31/08	Home Energy Performance	IRP Actual	3,480 0	8,195 0	14,463	0.5	1.2	2.0 0.0		\$ 1,820 \$ \$ 371 \$		2.39	3.19
Actual			Variance	(3,480)	(8,195)	(14,463)	(1)	(1)	(2)		\$ (1,449) \$		(2.39)	(3.19
IRP Expected	3/2/09	Res. DR-CPP w/ Smart Thermostat	IRP Actual	0	0	159 0	0.0	0.0 0.0	1.8 0.0	\$ 300	\$ 300 \$	300	1.37	1.30
Actual			Variance	0	0	(159)	0	0	(2)	\$ 300	\$ 300 \$	(206)	(1.37)	(1.30
IRP Expected	10/31/08	Res. DR - Direct Load Control	IRP Actual	495 0	1,013	1,554	5.5 0.0	11.3	17.3	\$ - :	s - s	-	1.93	1.78
Actual			Variance	(495)	(1,013)	(1,554)	(6)	(11)	(17)			(3,955)	(1.93)	(1.78
IRP Expected	1/1/09 7/28/10	HVAC CheckMe!	IRP Actual	0	7,368 798	17,086 5,101	0.0	1.5	3.5 1.5	\$ 622	\$ 943 \$	2,002	1.55	1.92
Actual			Variance	0	(6,570)	(11,985)	0	(1)	(2)		\$ (2,332) \$		(1.55)	(1.92
IRP Expected Actual	11/28/08 5/22/09	Res Lighting & Appliance	IRP Actual Variance	28,749 3,838 (24,911)	65,928 66,460 532	112,670 91,541 (21,129)	2.4 0.3 (2)	5.6 6.1 1	9.6 8.4 (1)	\$ 2,424		9,165	(2.29)	3.99
		On all Manhatina Distribution	1	(24,311)	302	(21,123)	(2)	'		ψ (001)	012 4	(3,230)	(2.23)	(0.00
IRP Expected	7/7/10	Social Marketing Distribution	IRP Actual	0	3,486	7,706	0.0	0.3	0.7		y 102 4	477	0.00	0.00
Actual			Variance		3,486	7,706	0	0		*			0.00	
IRP Expected	9/1/08 7/30/09	Res. Low Income	IRP Actual	4,581 0	9,162 5,201	13,742 9,042	0.3	0.5 0.6	0.8 1.0	\$ 1,169	\$ 3,893 \$	5,478	0.88	1.00
Actual			Variance	(4,581)	(3,961)	(4,700)	(0)	0	0		\$ (2,088) \$		(0.88)	(1.00
IRP Expected	11/28/08 6/6/09	Res. Multi-Family	IRP Actual	10,012	24,136	34,026	1.8	4.3 0.0	6.2 0.0	\$ 860	\$ 1,240 \$	1,240	2.63	3.26
Actual			Variance	(10,012)	(24,107)	(33,997)	(2)	(4)	(6)		, (,	(1)===/	(2.63)	(3.26
IRP Expected Actual	N/A 7/28/10	Appliance Recycling	IRP Actual Variance	0 0	551 551	4,172 4,172	0.0 0.0 0	0.0 0.1 0	0.0 0.6	\$ - :	\$ 109 \$	859	(1.71)	2.13
			IRP	47,317	115,802	193,854	10.5	24.4	41.3	•	\$ 22,500 \$			
		Total Residential Portfolio	Actual Variance	3,838 (43,479)	76,525 (39,277)	117,591 (76,263)	0.3 (10)	7.3 (17)	12.2 (29)	\$ 5,745	\$ 14,872 \$	19,892		
IRP	9/1/08	C&I Custom	IRP	27,099	54,198	81,297	3.5	7.0	10.6		\$ 8,510 \$	12,925	2.23	2.94
Expected Actual	2/11/09		Actual Variance	5,018 (22,081)	57,365 3,167	81,634 337	(2.5)	8.8 1.8	12.5 1.9	\$ 1,882 \$ (2,321)			(2.23)	(2.94
IRP	11/28/09	C&I Prescriptive	IRP	32,470	68,985	109,738	4.8	10.5	16.6	\$ 4,871	\$ 11,327 \$		1.89	2.44
Expected Actual			Actual Variance	10,466 (22,004)	23,359 (45,626)	32,326 (77,412)	1.9	4.0 (6.5)		\$ 1,524	\$ 3,007 \$	3,989	(1.89)	(2.44
IRP	9/1/08	C&I Retro-Commissioning	IRP	11,573	24,007	37,357	1.4	2.8	4.4	\$ 562	\$ 1,182 \$	1,863	3.17	6.78
Expected Actual	7/25/09	_	Actual Variance	(11,573)	1,558 (22,449)	3,581	0.0 (1.4)	0.2 (2.6)		\$ 74	\$ 314 \$	912	(3.17)	(6.78
IRP	9/1/08	Commercial Demand Credit	IRP	760	760	760	38.0	38.0	38.0	\$ 410		1,261	1.56	1.08
Expected Actual	7/1/09		Actual Variance	156 (604)	156 (604)	156 (604)	7.5 (30.5)	7.5 (30.5)	7.5 (30.5)				(1.56)	(1.08
IRP Expected	3/2/09	Commercial DR - CPP w/ Smart Therm.	IRP Actual	0	0	178 0	0.0	0.0	2.0 0.0			488	1.60	1.51
Expected Actual			Actual Variance	0	0	(178)	0.0	0.0	(2.0)			(488)	(1.60)	(1.51
IRP Expected	2/2/09 5/3/09	Commercial New Construction	IRP Actual	817 0	1,634 4,809	2,451 7,596	0.3	0.5 0.7	0.8 1.4		\$ 1,348 \$ \$ 841 \$		1.14	1.35
Actual	.		Variance	(817)	3,175	5,145	(0.3)	0.2	0.6				(1.14)	(1.35
IRP Expected	7/18/08	Industrial Interruptible Tariff	IRP Actual	3,800 0	3,800 0	3,800 0	47.5 0.0	47.5 0.0	47.5 0.0				1.59	0.36
Actual			Variance	(3,800)	(3,800)	(3,800)	(47.5)	(47.5)	(47.5)	\$ (1,999)	\$ (4,047) \$	(6,147)	(1.59)	(0.36
		Total C&I Portfolio	IRP Actual	76,519 15,640	153,384 87,247	235,581 125,293	96 10	106 21	120 27					
			Variance	(60,879)	(66,137)	(110,288)	(85)	(85)	(93)		\$ (14,884) \$			

Education Program Information Program	IRP Actual Variance IRP Actual Variance						\$ 500 \$ 1,200 \$ 2,100 \$ (500) \$ (1,200) \$ (2,100) \$ 500 \$ 1,200 \$ 2,100 \$ 484 \$ 1,230 \$ 1,232 \$ (16) \$ 30 \$ (868)		
Total Education and Information Programs	IRP Actual Variance						\$ 1,000 \$ 2,400 \$ 4,200 \$ 484 \$ 1,230 \$ 1,304 \$ (516) \$ (1,170) \$ (2,896)		
Total Portfolio (Without Indirect Costs)	IRP Actual Variance	123,836 19,478 (104,358)	269,186 163,772 (105,414)	429,435 242,884 (186,551)	106 11 (95)	131 29 (102)	161 \$ 22,821 \$ 52,144 \$ 88,414 39 \$ 9,844 \$ 28,462 \$ 38,293 (122) \$ (12,977) \$ (23,682) \$ (50,120)	1.71 2.	2.04
Portfolio Administration - Contractor	IRP Actual Variance						\$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$		
Portfolio Administration - Ameren Missouri	IRP Actual Variance						\$ 1,100 \$ 2,500 \$ 4,200 \$ 736 \$ 1,717 \$ 2,045 \$ (364) \$ (783) \$ (2,156)		
EM&V - Contractor	IRP Actual Variance						\$ 1,100 \$ 2,500 \$ 4,200 \$ 304 \$ 1,351 \$ 1,767 \$ (796) \$ (1,149) \$ (2,433)		
Total Portfolio Indirect Costs	IRP Actual Variance						\$ 2,200 \$ 5,000 \$ 8,400 \$ 1,040 \$ 3,068 \$ 3,811 \$ (1,160) \$ (1,932) \$ (4,589)		
Total Ameren Missouri DSM Portfolio	IRP Actual Variance	123,836 19,478 (104,358)	269,186 163,772 (105,414)	429,435 242,884 (186,551)	106 11 (95)	131 29 (102)	161 \$ 25,021 \$ 57,144 \$ 96,814 39 \$ 10,884 \$ 31,531 \$ 42,105 (122) \$ (14,137) \$ (25,614) \$ (54,709)	1.71 2.	2.04