

FILED

OCT 13 2011

**Missouri Public
Service Commission**

Exhibit No.:

Issue(s):

Witness/Type of Exhibit:

Sponsoring Party:

Case No.:

EXHIBIT

Energy Efficiency

Kind/Rebuttal

Public Counsel

GT-2011-0410

REBUTTAL TESTIMONY

OF

RYAN KIND

Submitted on Behalf of
the Office of the Public Counsel

**UNION ELECTRIC COMPANY
D/B/A AMEREN MISSOURI**

OPC Exhibit No. 1
Date 10/6/11 Reporters TL
File No. GT-2011-0410

Case No. GT-2011-0410

September 8, 2011

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

In the Matter of the Union Electric)
Company's (d/b/a Ameren Missouri) Gas)
Service Tariffs Removing Certain)
Provisions for Rebates from Its Missouri)
Energy Efficient Natural Gas Equipment)
and Building Shell Measure Rebate)
Program.)

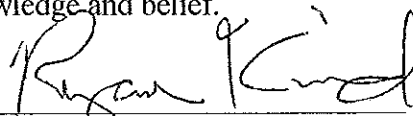
Case No. GT-2011-0410

AFFIDAVIT OF RYAN KIND

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Ryan Kind, of lawful age and being first duly sworn, deposes and states:

1. My name is Ryan Kind. I am a Chief Utility Economist for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached affidavit are true and correct to the best of my knowledge and belief.




Ryan Kind

Subscribed and sworn to me this 8th day of September 2011.



JERENE A. BUCKMAN
My Commission Expires
August 23, 2013
Cole County
Commission #09754037



Jerene A. Buckman
Notary Public

My commission expires August 23, 2013.

REBUTTAL TESTIMONY
OF
RYAN KIND
UNION ELECTRIC COMPANY
CASE NO. GT-2011-0410

1 **Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

2 A. Ryan Kind, Chief Energy Economist, Office of the Public Counsel, P.O. Box 2230,
3 Jefferson City, Missouri 65102.

4 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL AND EMPLOYMENT BACKGROUND.**

5 A. I have a B.S.B.A. in Economics and a M.A. in Economics from the University of
6 Missouri-Columbia (UMC). While I was a graduate student at UMC, I was employed as
7 a Teaching Assistant with the Department of Economics, and taught classes in
8 Introductory Economics, and Money and Banking, in which I served as a Lab Instructor
9 for Discussion Sections.

10 My previous work experience includes several years of employment with the Missouri
11 Division of Transportation as a Financial Analyst. My responsibilities at the Division of
12 Transportation included preparing transportation rate proposals and testimony for rate
13 cases involving various segments of the trucking industry. I have been employed as an
14 economist at the Office of the Public Counsel (Public Counsel or OPC) since 1991.

15 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THIS COMMISSION?**

Rebuttal Testimony of
Ryan Kind

1 A. Yes, prior to this case I submitted written testimony in numerous gas rate cases, several
2 electric rate design cases and rate cases, as well as other miscellaneous gas, water,
3 electric, and telephone cases.

4 **Q. HAVE YOU PROVIDED COMMENTS OR TESTIMONY TO OTHER REGULATORY OR**
5 **LEGISLATIVE BODIES ON THE SUBJECT OF UTILITY REGULATION AND**
6 **RESTRUCTURING?**

7 A. Yes, I have provided comments and testimony to the Federal Energy Regulatory
8 Commission (FERC), the Missouri House of Representatives Utility Regulation
9 Committee, the Missouri Senate's Commerce & Environment Committee and the
10 Missouri Legislature's Joint Interim Committee on Telecommunications and Energy.

11 **Q. HAVE YOU BEEN A MEMBER OF, OR PARTICIPANT IN, ANY WORK GROUPS,**
12 **COMMITTEES, OR OTHER GROUPS THAT HAVE ADDRESSED ELECTRIC AND GAS UTILITY**
13 **REGULATION AND POLICY ISSUES?**

14 A. Yes. I am currently a member of the National Association of State Consumer Advocates
15 (NASUCA) Electric Committee, and the Stakeholder Steering Committee (SSC) of the
16 Eastern Interconnection Planning Collaborative (EIPC). I have served on the Missouri
17 Department of Natural Resources Weatherization Policy Advisory Committee, as the
18 public consumer group representative to the Midwest ISO's (MISO's) Advisory
19 Committee and as the small customer representative on both the NERC Operating
20 Committee and the NERC Standards Authorization Committee. During the early 1990s, I
21 served as a Staff Liaison to the Energy and Transportation Task Force of the President's
22 Council on Sustainable Development.
23

1 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

2 A. The purpose of my rebuttal testimony is to respond to Union Electric d/b/a
3 Ameren Missouri's ("UE" or "the Company") proposal to make significant
4 changes to its Energy Efficient Natural Gas Equipment and Building Shell
5 Measure Rebate Program. This rebuttal testimony also responds to the direct
6 testimony of UE witnesses Kyle Shoff and Gregory W. Lovett.

7 **Q. PLEASE DESCRIBE THE PROGRAMS IN UE'S TARIFF THAT PROMOTE ENERGY**
8 **EFFICIENCY.**

9 A. UE currently has a portfolio of energy efficiency programs that includes a
10 Weatherization Program designed to assist consumers through conservation,
11 education and weatherization in reducing their use of energy; and its Energy
12 Efficient Natural Gas Equipment and Building Shell Measure Rebate Programs
13 ("Rebate Program").

14 **Q. PLEASE DESCRIBE UE'S REBATE PROGRAMS.**

15 A. UE's current Rebate Programs are found in UE's tariff at P.S.C. Mo. No. 2, 7th
16 Revised Sheets No. 78 through 83. Its stated purpose is "to encourage more
17 effective utilization of natural gas by encouraging energy efficiency
18 improvements through the replacement of less efficient natural gas equipment
19 with high efficient ENERGY STAR® qualified natural gas equipment and other
20 high efficiency equipment and building shell measures." Rebates are offered to
21 cover a portion of the cost of eight (8) residential measures and eighteen (18)
22 general service measures, as shown on the following tables:

Residential Measures

Rebuttal Testimony of
Ryan Kind

1. Thermostats
2. Natural Gas Furnace with 92% AFUE¹
3. Natural Gas Furnace with 96% AFUE
4. Natural Gas Boiler
5. Natural Gas Tank Storage Water Heater (EF rating ≥ 0.62 and < 0.67)²
6. Natural Gas Tank Storage Water Heater (EF rating of ≥ 0.67)
7. Natural Gas Tank Storage or Tankless Water Heater (EF rating of ≥ 0.82)
8. Building Shell Equipment (insulation, windows, doors, stripping, wraps, etc.)

General Service Measures

1. Thermostats
2. Natural Gas Furnace of $< 150,000$ BTU with 92% AFUE
3. Natural Gas Furnace of $< 150,000$ BTU with 96% AFUE
4. Natural Gas Furnace of $\geq 150,000$ BTU with AFUE of $\geq 90\%$

¹ AFUE refers to Annual Fuel Utilization Efficiency, defined in UE's tariff as: "Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input. It is a measure of the heat actually delivered by a furnace to the structure compared to the heat potential in amount of fuel supplied to the furnace. For example, a furnace that has a 92% AFUE rating converts 92% of the fuel supplied as heat to the structure – the other 8% is lost as exhaust."

² EF refers to Energy Factor, which is an overall energy efficiency rating for water heaters.

Rebuttal Testimony of
Ryan Kind

5. Steam Trap Replacement
6. Natural Gas Continuous Modulating Burner (new or replacement)
7. Natural Gas Fired Boiler Tune-up
8. Primary Air Damper
9. Natural Gas Food Service Steamer
10. Natural Gas Food Service Fryer
11. Natural Gas Food Service Griddle
12. Natural Gas Food Service Oven
13. Natural Gas Tank Storage Water Heater (EF rating ≥ 0.62 and < 0.67)
14. Natural Gas Tank Storage Water Heater (EF rating of ≥ 0.67)
15. Natural Gas Tank Storage or Tankless Water Heater (EF rating of ≥ 0.82)
16. Natural Gas Boiler Replacement
17. Building Shell Measures – Commercial Energy Audit Improvement
18. Building Shell Measures – General Service Non-Energy Audit Improvement

1 **Q. PLEASE EXPLAIN HOW UE'S CURRENT ENERGY EFFICIENT NATURAL GAS**
2 **EQUIPMENT AND BUILDING SHELL MEASURE REBATE PROGRAMS ORIGINATED.**

3 **A.** UE's Rebate Programs were initially proposed by Missouri Department of Natural
4 Resources (MDNR) witness Ms. Anita Randolph in UE's general rate increase
5 Case No. GR-2003-0517. The parties to the case eventually agreed through a
6 Unanimous Stipulation and Agreement, later approved by the Commission, that
7 UE would implement energy efficiency equipment rebate programs and that UE
8 shareholders would provide funding for the program at a level of \$55,000 per
9 year. The tariffs implementing these new programs became effective on February
10 1, 2005.

1 **Q. WHAT REBATES DID UE'S REBATE PROGRAMS ORIGINALLY PROVIDE IN 2005?**

2 A. UE's Rebate Programs originally offered rebates for program participants that
3 purchased 1) thermostats; 2) low flow shower heads/aerators; 3) water heater
4 wraps; 4) hot water pipe insulation; 5) residential Energy Star rated boilers; 6)
5 residential Energy Star rated furnaces; or 7) commercial Energy Star rated natural
6 gas utilization equipment.

7 **Q. WERE ANY MODIFICATIONS MADE TO UE'S REBATE PROGRAMS IN 2006?**

8 A. Yes. In 2006, in Case No. GT-2007-0108, the UE Energy Efficiency
9 Collaborative (EEC) agreed to a number of changes to the Rebate Programs,
10 including the discontinuation of rebates for low flow shower heads, water heater
11 wraps and hot water pipe insulation due to low utilization.

12 **Q. WERE ANY MODIFICATIONS MADE TO UE'S REBATE PROGRAMS IN 2007?**

13 A. Yes. In 2007 the EEC agreed, through the Commission's approval of a
14 Stipulation and Agreement between EEC members filed in UE's general rate
15 increase Case No. GR-2007-0003 that UE would increase funding of the Rebate
16 Programs from \$55,000 funded by UE's shareholders, to \$100,000 annually
17 funded by ratepayers through rates. The EEC did not propose changes to the
18 program measures.

19 **Q. WERE ANY MODIFICATIONS MADE TO UE'S REBATE PROGRAMS IN 2008?**

20 A. Yes. The EEC agreed to additional qualifying high efficiency natural gas
21 equipment measures for both residential and general service customers, and to
22 new standards for qualifying equipment. For residential customers, the EEC

1 agreed to add “natural gas boilers” to the list of qualifying residential equipment,
2 which already included thermostats and natural gas furnaces. For commercial
3 customers, the EEC agreed to expand the list from “Commercial EnergyStar®
4 rated natural gas utilization equipment”, to include a list of ten (10) qualifying
5 high efficiency equipment that included thermostats, furnaces, steam trap
6 replacements, natural gas continuous modulating burners, natural gas boiler tune-
7 ups, primary air dampers, natural gas food service steamers, and natural gas food
8 service fryers. The Commission approved these changes, effective January 1,
9 2009.

10 **Q. WERE ANY MODIFICATIONS PROPOSED FOR UE’S REBATE PROGRAMS IN 2010?**

11 A. Yes. On October 21, 2010, UE proposed changes to reallocate funding between
12 residential and general service measures that UE claimed in its cover letter was
13 “due to a greater than expected participation by Residential Service customers and
14 a less than expected participation by General Service customers” (File No. JG-
15 2011-0211). All other EEC members voiced their opposition to UE’s proposed
16 changes, but UE filed the proposed change anyway. The Commission granted
17 OPC’s motion to suspend the tariff filing and opened Case No. GT-2011-0130 to
18 address the proposed changes.

19 **Q. WAS CASE NO. GT-2011-0130 CONSOLIDATED WITH ANY OTHER RELATED**
20 **CASE?**

21 A. Yes. On November 2, 2010, OPC filed its Motion to Resolve Issues Regarding
22 UE’s Energy Efficiency Programs, which the Commission docketed as Case No.
23 GO-2011-0131. OPC asked the Commission to resolve certain issues surrounding
24 UE’s actions regarding the Rebate Programs. In October 2010, UE stopped

1 accepting new rebate applications from residential customers while at the same
2 time embarking on a Rebate Program marketing campaign with radio ads,
3 billboards, billing inserts and a press release issued just one month prior to halting
4 rebate applications. In other words, UE was still marketing energy efficiency
5 programs that it had ceased to offer to customers, and OPC asked the Commission
6 to investigate. The Commission consolidated Case Nos. GT-2011-0130 and GO-
7 2011-0131, making GT-2011-0130 the lead case.

8 **Q. HOW WAS CONSOLIDATED CASE NO. GT-2011-0130 RESOLVED?**

9 A. The issues raised in GT-2011-0130 were resolved through a Unanimous
10 Stipulation and Agreement filed in UE's most recent general rate case, Case No.
11 GR-2010-0363. The Unanimous Stipulation and Agreement ("Agreement") and
12 related tariff changes were the last changes made to the Rebate Programs. In the
13 Agreement, the EEC agreed to the following terms and conditions, which were
14 ordered by the Commission in its approval of the Agreement. The Agreement,
15 and terms under which the current Rebate Program are to operate, includes the
16 following relevant provisions:

- 17 • Annual funding for natural gas energy efficiency programs increased to
18 \$700,000 in rates, and that UE "agrees to a target level of annual funding to
19 be achieved within the next three years ramping up by year three to an
20 amount equal to 0.5% of gross operating revenues for gas service,
21 including gas cost, or approximately \$850,000, for expenditures prudently
22 incurred on cost-effective programs."
- 23 • "The Company shall perform a post-implementation evaluation of the
24 effectiveness of its non low income weatherization energy efficiency
25 programs... Post-implementation evaluations of all programs or measures

1 shall include usage data for program participants through the end of the
2 month of April 2012, and be completed by December 31, 2012. Post-
3 implementation evaluations will generally be performed by an outside firm
4 and include both a process evaluation and an impact evaluation. Proposed
5 post-implementation evaluations shall be discussed with the Energy
6 Efficiency Advisory Group prior to issuing RFPs for evaluations and again
7 prior to the final selection of an outside firm to perform a post-
8 implementation evaluation.”

9 • “The Energy Efficiency Collaborative will function as an advisory group
10 and shall hereafter be referred to as the Energy Efficiency Advisory Group
11 (EEAG). Ameren Missouri shall be responsible for all final decisions
12 regarding its natural gas energy efficiency programs. Participation in the
13 group shall not affect a party’s right to question the prudence of the
14 planning and or implementation of energy efficiency programs in future
15 cases.”

16 • “Expenditures of more than \$700,000 incurred in a calendar year and
17 related to the Energy Efficiency programs shall be placed in a regulatory
18 asset account...and the unamortized balance in the account for prudently-
19 incurred cost-effective program expenditures will be included in rate base.”

20 • “The Company agrees to file no later than January 31, 2011, the tariff
21 sheets attached hereto as Appendix C. Such tariffs shall provide for
22 uninterrupted availability of this energy efficiency programs through
23 December 31, 2012. The parties agree that Ameren Missouri may file with
24 the Commission proposed revised tariff sheets concerning the Energy
25 Efficiency programs, if Ameren Missouri believes circumstances warrant
26 changes.”

1
2 **Q. IN THE SETTLEMENT OF CASE NOS. GR-2010-0363, GT-2011-0130, AND GO-**
3 **2011-0131, DID THE SETTLEMENT SIGNATORIES AGREE TO ADDITIONAL**
4 **CHANGES TO THE REBATE PROGRAM MEASURES?**

5 A. Yes. The signatories agreed to continue the existing program measures, and to
6 add certain residential and general service equipment as qualifying high efficiency
7 equipment. The signatories agreed to add equipment rebates for residential
8 customers that purchase: 1) natural gas tank storage water heaters (Tiers I and II);
9 2) natural gas tankless water heaters; and 3) building shell measures. The EEC
10 also agreed to add equipment rebates for commercial customers that purchase: 1)
11 natural gas food service griddles; 2) natural gas food service ovens; 3) natural gas
12 tank storage water heaters (Tiers I and II); 4) natural gas tankless water heaters; 5)
13 natural gas boiler replacements; and 6) building shell measures.

14 **Q. HOW LONG WERE THESE AGREED UPON REBATE PROGRAMS EFFECTIVE BEFORE**
15 **UE SOUGHT TO MAKE CHANGES TO THE REBATE PROGRAMS?**

16 A. UE's current Rebate Programs tariff became effective on February 20, 2011.
17 Several weeks later, on March 10, UE emailed the newly created Energy
18 Efficiency Advisory Group (EEAG), formerly the Energy Efficiency
19 Collaborative, indicating that it wanted to make certain tariff changes. UE
20 appeared to abandon this proposal after receiving my emailed response (See
21 Attachment A) on March 17, 2011. Then, on April 19, 2011, UE advised the
22 EEAG of its next proposal to amend its Rebate Program tariff. OPC, Staff and
23 MDNR all voiced their opposition to UE's proposed changes, but despite this
24 opposition, UE filed its proposed changes with the Commission on May 27, 2011,

1 and later revised its proposed changes with a replacement tariff filing made on
2 June 8, 2011 (File No. JG-2011-0620).

3 **Q. WHAT CHANGES DOES UE PROPOSE TO MAKE TO ITS ENERGY EFFICIENT**
4 **NATURAL GAS EQUIPMENT AND BUILDING SHELL MEASURE REBATE**
5 **PROGRAMS?**

6 A. UE's tariff filing of June 8, 2011 proposes to remove certain energy efficiency
7 measures from UE's energy efficiency programs and other changes. Specifically,
8 UE proposes to eliminate the following measures that it had agreed to include just
9 several months prior:

10 Residential Service

- 11 • Natural Gas Tank Storage Water Heaters (Tier II) with an EF rating of \geq
12 0.67
- 13 • Natural Gas Tank Storage or Tankless Water Heaters with an EF rating of
14 ≥ 0.82
- 15 • Building Shell Measures (weather stripping, heater wraps, pipe wraps,
16 insulation, caulking, faucet aerators and low flow shower heads).

17 General Service

- 18 • Natural Gas Continuous Modulating Burner New Installation or Burner
19 Replacement
- 20 • Natural Gas Fired Boiler Tune-Up
- 21 • Natural Gas Food Service Griddle
- 22 • Natural Gas Food Service Oven
- 23 • Natural Gas Tank Storage or Tankless Water Heater with an EF rating of \geq
24 0.82

- Natural Gas Boiler Replacement
- Building Shell Measures (weather stripping, heater wraps, pipe wraps, insulation, caulking, faucet aerators and low flow shower heads).

Q. WHAT WAS YOUR INITIAL RESPONSE TO UE'S REQUEST TO ELIMINATE THESE MEASURES?

A. I was initially surprised because I did not expect UE to negotiate an agreement with Staff, DNR and OPC, an agreement where these parties agreed to relinquish control of the Rebate Program to UE, only to have UE immediately seek to eliminate measures that the parties had negotiated and agreed to include in the Rebate Program. I was not surprised, however, by UE's efforts to minimize rebate expenditures since UE's primary objective is to create wealth for its shareholders, and energy efficiency spending beyond what is already included in rates would need to be funded by UE shareholders until recovered in rates following UE's next rate case. In addition, the management of UE and its parent company, Ameren, appear to be extremely sensitive to any erosion of earnings from decreases in usage resulting from its energy efficiency programs. This same sensitivity appears to be leading to the elimination of the UE electric energy efficiency programs for some indefinite period of time. UE has already stopped accepting rebate applications for its electric energy efficiency programs (except for a program funded by DNR) offered to its business customers and this is expected to happen for its electric residential programs in the next few weeks.

Q. WHAT REASONS DOES UE GIVE FOR SEEKING TO ELIMINATE THE ABOVE MENTIONED PROGRAM MEASURES?

1 A. UE's basic argument is that the Agreement requires expenditures on UE's Rebate
2 Program to be cost-effective, and that it seeks to remove measures that it believes
3 are not cost-effective.

4 **Q. WHAT IS YOUR RESPONSE TO UE'S ARGUMENT THAT UE MUST BE ALLOWED TO**
5 **ELIMINATE MEASURES BECAUSE UE WILL ONLY BE ALLOWED TO RECOVER**
6 **"COST-EFFECTIVE" EXPENDITURES, AND THEREFORE, IT SEEKS TO ENSURE THAT**
7 **ONLY COST-EFFECTIVE MEASURES ARE USED?**

8 A. UE's argument that it could somehow be penalized for offering rebate measures
9 that are not cost effective is not rational. The signatories to the Agreement,
10 including all members of the EEAG, agreed to include the specific program
11 measures that UE seeks to eliminate. No EEAG member would challenge the
12 prudence or cost-effectiveness of the decision to use the agreed upon measures
13 between February 2011, when the new program measures became effective in
14 UE's tariff, and December 2012, when the signatories agreed the program
15 measures are to be evaluated by a third party. Furthermore, UE will have a much
16 better idea of what is cost effective and what is not cost effective following the
17 December 2012 third party evaluation. This will give UE the opportunity to
18 discontinue program measures that the evaluator determines are not cost effective.
19 Therefore, UE can avoid any prudence or cost-effectiveness challenges by simply
20 eliminating measures that are proven by the evaluator not to be cost effective.
21 UE's concern, that UE could have expenditures disallowed due to the decision to
22 offer the agreed upon measures and rebates, has no merit.

23 **Q. WHAT TOPICS DOES UE WITNESS KYLE SHOFF COVER IN HIS DIRECT TESTIMONY**
24 **THAT YOU WILL ADDRESS IN YOUR REBUTTAL TESTIMONY?**

Rebuttal Testimony of
Ryan Kind

1 A. Mr. Shoff presents UE's views on how cost effectiveness should be determined for gas
2 utilities in Missouri and provides a high level description of the Total Resource Cost
3 analysis that he performed for UE.

4 Q. BEGINNING AT LINE 20 ON PAGE 8 OF HIS TESTIMONY, MR. SHOFF PRESENTS HIS
5 VIEWS ON "WHY THE TRC TEST IS THE BEST METHOD TO EVALUATE THE COST-
6 EFFECTIVENESS OF NATURAL GAS ENERGY EFFICIENCY MEASURES AND PROGRAMS."
7 DO YOU BELIEVE THAT THE COMMISSION SHOULD MAKE A DETERMINATION IN THIS
8 CASE ABOUT WHAT TEST BEST MEASURES THE COST-EFFECTIVENESS OF NATURAL
9 GAS ENERGY EFFICIENCY MEASURES AND PROGRAMS?

10 A. No. However, OPC recommends that the Commission acknowledge the need to set cost
11 effectiveness standards for gas energy efficiency programs in its Report and Order in this
12 case. By adding definitions for "cost effective program" and the TRC test to its proposed
13 tariffs in this case, the Company appears to be trying to have the Commission determine
14 this issue for the entire natural gas utility industry in Missouri without any input from
15 other gas utilities or stakeholders not represented in this case. This is obviously an
16 important issue where all Missouri natural gas utilities and stakeholders should have an
17 opportunity to present their views for consideration by the Commission. Public Counsel
18 believes that the best way to accomplish this would be for the Commission to initiate a
19 rulemaking for natural gas energy efficiency programs and recommends that the
20 Commission declare its intent to initiate such a rulemaking in the Report and Order in
21 this case.

22 Q. DOES THE COMMISSION ALREADY HAVE A COST EFFECTIVENESS STANDARD IN PLACE
23 THAT WOULD APPLY TO THE ENERGY EFFICIENCY PROGRAMS OF MISSOURI NATURAL
24 GAS UTILITIES?

1 A. It could be argued that the Commission's Utility Promotional Practice rule already
2 contains such a standard. Subsection (6) (D) of 4 CSR 240-14.010 defines "cost
3 effective" to mean that "the present value of life-cycle benefits is greater than the present
4 value of life-cycle costs to the provider of an energy service."

5 **Q. THE DEFINITION OF A "COST EFFECTIVE PROGRAM" CONTAINED IN UE'S PROPOSED**
6 **TARIFF SHEETS IS "A PROGRAM THAT HAS A TOTAL RESOURCE COST (TRC) TEST**
7 **GREATER THAN 1.0." IS THIS DEFINITION CONSISTENT WITH THE COST EFFECTIVE**
8 **DEFINITION IN THE COMMISSION'S UTILITY PROMOTIONAL PRACTICE RULE?**

9 A. No. The two definitions do not appear to be the same. In order to compare the two
10 definitions, one must assume that in UE's proposed tariff language, the Company
11 intended to refer to a TRC test **result** that is greater than one since the tariff language as
12 written, "Total Resource Cost (TRC) test greater than 1.0." has no clear meaning and
13 does not make any sense. The TRC test itself will not be a number either greater or less
14 than one. The test only has a numerical value when specific inputs are entered into the
15 TRC formula and a numerical value then becomes the test result once the calculations are
16 performed.

17 **Q. YOU STATED IN YOUR PRIOR ANSWER THAT THE COST EFFECTIVENESS TESTS IN THE**
18 **PROPOSED UE TARIFF LANGUAGE AND THE COMMISSION'S UTILITY PROMOTIONAL**
19 **PRACTICE RULE "DO NOT APPEAR TO BE THE SAME." PLEASE IDENTIFY THE MAJOR**
20 **DIFFERENCE AND ADDRESS ANY PROBLEMS THAT MAY BE CAUSED BY HAVING TWO**
21 **DIFFERENT COMMISSION APPROVED DEFINITIONS OF COST EFFECTIVENESS FOR**
22 **NATURAL GAS ENERGY EFFICIENCY PROGRAMS.**

23 A. The main difference between the two definitions is that the TRC test, as defined in UE's
24 tariff, includes the incremental costs to the utility **and to participants** associated with

1 implementing a measure whereas the cost effectiveness definition in the Commission's
2 Utility Promotional Practice rule only includes the incremental costs to the utility. The
3 new definition in UE's tariff also specifies that the avoided costs will include "probable
4 environmental costs" and this category of avoided costs is not specified in the cost
5 effectiveness definition in the Commission's Utility Promotional Practice rule.

6 **Q. DOES THE ADDITION OF PARTICIPANT COSTS IN UE'S PROPOSED DEFINITION**
7 **GENERALLY LEAD TO DIFFERENT COST EFFECTIVENESS TEST RESULTS THAN A TEST**
8 **LIKE THAT CONTAINED IN THE COST EFFECTIVENESS DEFINITION IN THE**
9 **COMMISSION'S UTILITY PROMOTIONAL PRACTICE RULE WHICH INCLUDES ONLY**
10 **COSTS TO THE UTILITY?**

11 **A.** Yes, the test results for most of the measures that UE asserts were not cost effective
12 based upon the TRC test (because they were less than 1.0) would be higher when
13 calculated using the cost effectiveness definition in the Commission's Utility Promotional
14 Practice rule. This is because the incremental cost of implementing programs is included
15 in the denominator of the formula for calculating cost effectiveness test results. When the
16 denominator is increased by including participant costs in addition to utility costs, then
17 the test results will generally have lower values than the values which would result from
18 the cost effectiveness definition in the Commission's Utility Promotional Practice rule.
19 Accordingly, the cost effectiveness test results that appear under the "TRC" column in
20 the table on page 4 of Mr. Shoff's testimony for most, if not all of the measures would be
21 significantly higher if participant costs were excluded from the denominator as they are
22 excluded in the cost effectiveness definition in the Commission's Utility Promotional
23 Practice rule.

24 UE has not provided test results based upon the cost effectiveness definition in the
25 Commission's Utility Promotional Practice rule for the measures that it proposes to delete

1 from its tariff so the Commission does not have sufficient cost effectiveness information
2 to rely upon in deciding whether to approve the proposed deletion of measures from the
3 Company's tariff. Furthermore, OPC believes that measures should not be deleted prior
4 to reviewing the results of the post implementation evaluation that all parties agreed upon
5 in the Stipulation and Agreement in Case No. GR-2010-0363.

6 **Q. COULD THE TEST RESULTS FOR THE TRC TEST AS DEFINED IN UE'S PROPOSED**
7 **TARIFF AND THE TEST RESULTS FOR THE COST EFFECTIVENESS DEFINITION IN THE**
8 **COMMISSION'S UTILITY PROMOTIONAL PRACTICE RULE POSSIBLY BE THE SAME**
9 **UNDER ANY CIRCUMSTANCES, ASSUMING ALL TEST INPUTS WERE THE SAME EXCEPT**
10 **FOR THE INCLUSION OF PARTICIPANT COST IN THE TRC TEST?**

11 **A.** Yes, but this would be very unlikely for any programs other than low income programs
12 where the utility sometimes funds the full cost of the measures. The utility funded portion
13 of the total incremental costs is often referred to as the incentive payment and incentive
14 levels are generally set at a level of 50% or less of total incremental costs. I am not aware
15 of incentive payments covering anything close to 100% of incremental costs for the
16 measures that UE proposes to drop from its tariff. Therefore, as I noted in my prior
17 answer, "the cost effectiveness test results that appear under the "TRC" column in the
18 table on page 4 of Mr. Shoff's testimony for most, if not all of the measures would be
19 significantly higher if participant costs were excluded from the denominator."

20 **Q. CAN YOU PROVIDE A SIMPLE EXAMPLE OF HOW INCLUDING BOTH UTILITY AND**
21 **PARTICIPANT INCREMENTAL COSTS IN THE DENOMINATOR WOULD YIELD**
22 **SIGNIFICANTLY DIFFERENT RESULTS THAN INCLUDING ONLY UTILITY INCREMENTAL**
23 **COSTS IN THE DENOMINATOR?**

Rebuttal Testimony of
Ryan Kind

1 A. Yes. First assume that the benefits (avoided costs) included in the numerator are \$600.
2 Next assume that participant incremental costs are \$500 and utility incremental costs are
3 \$500. Under the TRC test where both utility and participant incremental costs are
4 included in the denominator, the result would equal $\$600/(\$500 + \$500) = 0.6$. Under the
5 Commission's definition of cost effectiveness in its Utility Promotional Practice rule,
6 only the utility costs are included in the denominator, so the result would equal
7 $\$600/\$500 = 1.2$.

8 **Q. ARE THERE OTHER ISSUES YOU WOULD LIKE TO ADDRESS REGARDING UE'S**
9 **APPROACH TO DROPPING MEASURES BASED UPON THE TRC MEASURE TEST**
10 **RESULTS THAT THE COMPANY HAS CALCULATED?**

11 A. Yes. Most of the measures that UE proposes to eliminate are building shell enhancement
12 measures that are part of its Residential and General Service energy audit improvement
13 programs. As implied by the name of these programs, customers are not eligible for
14 reimbursement for the energy audit improvement program measures except for "natural
15 gas energy saving equipment and building shell measures as recommended from
16 customer paid energy audit from a Qualified Auditor." There should not be a problem
17 with the measures recommended by a Qualified Auditor being cost effective so long as
18 UE is providing proper oversight of the program and dropping any auditors from the
19 Company's Value Added Partner Network that are found to be recommending measures
20 in their audit reports that are not cost effective under the specific circumstances in the
21 dwelling or business premises where the audit took place.

22 When eligibility for program measure incentives is based upon an audit of the customer's
23 premises, then the ex ante estimates of cost effectiveness are not always a good measure
24 of whether measures will be cost effective under the specific circumstances where the
25 measures are being installed. In fact, one of the advantages of programs that employ an

1 audit approach to determine customer eligibility for incentives is that this often works
2 better and yields more cost effective results than a "one size fits all" type of program.
3 The audit approach is generally referred to as a custom program whereas the "one size
4 fits all" type of program is generally referred to as a prescriptive program. UE's natural
5 gas furnace rebate program is an example of a prescriptive program.

6 UE already has a number of other programs that can be characterized as customer
7 programs including the gas and electric low income weatherization programs, the electric
8 residential "check me" program, the electric multi-family income qualified program, and
9 the electric business custom program. While these programs should be carefully designed
10 and implemented to encourage cost-effective outcomes, the real test of cost effectiveness
11 comes in the ex post evaluation of program results for custom type programs. The
12 Stipulation and Agreement in UE's last gas rate case, GR-2010-0363 requires an ex post
13 evaluation of cost effectiveness and given the other provision in the Stipulation and
14 Agreement for "uninterrupted availability" of these programs agreed upon in the
15 Stipulation and Agreement, OPC believes that this ex post evaluation needs to be
16 completed prior to making any decisions about removing measures from the tariff.

17 **Q. PLEASE SUMMARIZE ALL OF THE RECOMMENDATIONS THAT YOU HAVE MADE IN THIS**
18 **TESTIMONY.**

19 A. UE's proposed tariff sheets have been revised to add a definition of cost
20 effectiveness and specify that the TRC test as defined by UE's proposed tariff language
21 should be used to determine cost effectiveness at the program level. In addition, UE's
22 revised tariffs have removed a substantial number of measures from the residential
23 programs and from the general service programs. Due to the large number of measures
24 removed from the Residential energy audit improvement program, very little customer
25 participation should be expected if the Commission approves the removal of these

1 measures. Public Counsel makes the following recommendations regarding the proposed
2 tariff sheets that UE is seeking approval of in this case:

- 3 • The Commission should reject (1) UE's proposed new tariff language which
4 would define of cost effectiveness as it applies to UE's natural gas energy
5 efficiency programs and (2) the new tariff language which would specify that the
6 TRC test (as this test is defined by UE's proposed tariff language) should be used
7 to determine cost effectiveness at the program level. In addition to rejecting these
8 proposed additions to UE's tariff, the Commission should make a finding that
9 there is a need to specify how cost effectiveness will be determined for gas
10 utilities in Missouri and state its intention to address this issue (and possibly other
11 gas energy efficiency issues) associated with gas energy efficiency programs in a
12 new Commission rule.
- 13 • The Commission should reject UE's proposal to delete a large number of
14 measures from the Residential programs and the General Service programs for the
15 reasons stated previously in this testimony.

16 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

17 **A. Yes.**

Kind, Ryan

From: Kind, Ryan
Sent: Thursday, March 17, 2011 5:16 PM
To: 'Danahy, Dan B'; Warren, Henry; 'michael.stahlman@psc.mo.gov'; Buchanan, John
Cc: Lovett, Greg W; Poston, Marc
Subject: RE: Ameren Missouri NG Energy Efficiency Advisory Group

Dan,

The language that you are proposing is different from the language we discussed last fall. I do not recall discussing any language last fall that is similar to UE's new proposed language. The language we were discussing last fall was for a reduction in incentive payments when another utility was offering incentives for the same purpose, not an elimination of the UE incentive payment. Also, my recollection of the language we discussed last fall is that it was only applicable to the audit reimbursement portion of the HPwES program that we were discussing last fall. During settlement discussions, we decided to drop the HPwES program from the portfolio of UE gas efficiency programs as part of our discussion about managing the level of future budgets. So, I disagree that there were some intended changes discussed last fall that did not make it into the filed tariffs for the three programs (Building Shell Measures – Residential Home Energy Audit Improvement, Building Shell Measures – Commercial Home Energy Audit Improvement, Building Shell Measures – General Service Home Non-Energy Audit Improvement) that you are suggesting changes to at this time.

Regarding your comment about double dipping, I do not see incentive payments to encourage building shell measures by both UE gas and an electric utility that serves the same area such as Columbia Water & Light as being any different than the HPwES program in the Kansas City area where both MGE and KCPL often make payments to the same customer. From my perspective, both utilities make payments because the customers are benefitting from reductions in both gas and electric usage. I don't see this as double dipping but rather as appropriate support from both gas and electric utilities that roughly reflects the shared benefits that greater efficiency yields in terms of both gas and electric savings. Your proposal raises the question of why should Columbia Water & Light (the electric utility) be the only utility funding incentives for building shell measures in the Columbia area when UE's gas customers are also benefitting from the efficiency measures.

Unless there is something I'm missing here, the proposed changes do not appear to be consistent with the settlement that resulted in the currently effective natural gas energy efficiency tariff sheets, so OPC opposes the proposed changes.

Ryan

From: Danahy, Dan B [mailto:DDanahy@ameren.com]
Sent: Thursday, March 10, 2011 9:17 AM
To: Kind, Ryan; Warren, Henry; 'michael.stahlman@psc.mo.gov'; Buchanan, John
Cc: Danahy, Dan B; Lovett, Greg W
Subject: Ameren Missouri NG Energy Efficiency Advisory Group

Natural Gas Energy Efficiency Advisory Group –

Ameren Missouri wants to have the most cost effective natural gas energy efficiency programs possible. To ensure our programs are cost effective we must ensure our programs are being used in a way that encourages customers to make wise energy decisions and that their decisions ultimately produce energy savings that are cost justifiable. It is important for Ameren Missouri to provide rate payer funded rebates to its customers when those rebates provide the biggest benefit, not only for the participant but for all rate payers.

As you recall from our program design discussions last fall we noted then that participants in the Columbia area have the ability to double dip on rebates. These participants are able to receive rebates from the Ameren Missouri Energy Audit Improvement programs and from the City of Columbia for audit improvements that overlap those offered by Ameren Missouri. We had a clause in

the draft 2011 program tariff sheets to correct this situation however, it did not make the last minute changes to the tariff during our discussions in December.

To correct this, we have included proposed tariff language in the attached document that we believe would prevent the double dipping from happening in Columbia and in other areas should there be a similar overlap of audit programs. Please review the proposed changes as shown in the attached tariff. We want your advice on this language prior to filing. Please provide me with your comments by March 17, 2011.

Thank you,

Dan Danahy
Ameren Missouri

The information contained in this message may be privileged and/or confidential and protected from disclosure. If the reader of this message is not the intended recipient, or an employee or agent responsible for delivering this message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. Note that any views or opinions presented in this message are solely those of the author and do not necessarily represent those of Ameren. All e-mails are subject to monitoring and archival. Finally, the recipient should check this message and any attachments for the presence of viruses. Ameren accepts no liability for any damage caused by any virus transmitted by this e-mail. If you have received this in error, please notify the sender immediately by replying to the message and deleting the material from any computer. Ameren Corporation