Status Report AO-2011-0035

August 7, 2015

** Denotes Highly Confidential Information **

Ameren Missouri – Electric

Prepared by: John Rogers and Jason Huffman

Date: August 14, 2015

Collaborative Name and Description: Ameren Missouri Demand-Side Management ("DSM") Quarterly Stakeholder Group was ordered and approved in stipulation and agreements concerning Ameren Missouri's Chapter 22 Electric Utility Resource Planning filings in File Nos. EO-2006-0240 and EO-2007-0409. Ameren Missouri agreed to continue quarterly DSM stakeholder meetings as described in paragraph 14 of the Commission-approved Stipulation and Agreement in File No. EO-2012-0142. Ameren Missouri now identifies its stakeholder collaborative as the Energy Efficiency Regulatory Stakeholder Advisory Team.

Meetings: Held quarterly at Ameren Missouri's offices or through webcast for 4-5 hours.

Participants:

- Regular: Ameren Missouri, Staff, Office of the Public Counsel (OPC), Missouri Division of Energy (MO-DE), Natural Resource Defense Council (NRDC), Sierra Club, Earth Island Institute d/b/a Renew Missouri, Missouri Industrial Energy Consumers (MIEC), Barnes-Jewish Hospital, and Laclede Gas Company.¹
- Occasional: Community Action Agencies.
- Consultants: Lockheed Martin, Honeywell Utility Solutions, EnerNoc, Inc., The Brattle Group, Washington University, Cadmus Group, ADM Associates.
- Commission Evaluation, Measurement and Verification (EM&V) Auditor: Johnson Consulting Group.

Programs Summaries: See Attachment A.

Effectiveness of Participants: Ameren Missouri encourages participation and critical feedback. All participants freely express their points of view and provide advice. Ameren Missouri's consultants participate in many Energy Efficiency Regulatory Stakeholder Advisory Team meetings. Effective participation by all stakeholders is critical during planning, implementation, and EM&V activities for the initial 3-year program plan for the Company's Commission-approved Missouri Energy Efficiency Investment Act of 2009 (MEEIA) programs (PY2013, PY2014 and PY2015).

¹ All regular participants except Laclede Gas Company are signatories to the Commission-approved Stipulation and Agreement in File No. EO-2012-0142. However, in the Stipulation and Agreement, the signatories agreed that Laclede Gas Company may also participate as a stakeholder in the stakeholder group notwithstanding that it is not a signatory.

Success Stories:

- On August 1, 2012, the Commission approved a unanimous stipulation and agreement in File No. EO-2012-0142 approving eleven MEEIA programs for implementation beginning January 2, 2013, and a demand-side programs investment mechanism (DSIM) which allowed \$80 million annual revenue requirement in Ameren Missouri's then current general rate case (Case No. ER-2012-0166) for recovery of demand-side programs' costs and recovery of estimated lost margin revenues and which will allow the Company to earn a future performance incentive award based on after-the-fact verified energy savings from the programs.
- On January 27, 2014, Ameren Missouri's Rider EEIC became effective and replaced the DSIM tracker which had been effective since January 2, 2013.
- EnerNoc issued its Demand-side Management Market Potential Study in December 2013, for use in Ameren Missouri's October 1, 2014 Chapter 22 triennial compliance filing.
- During spring 2014, Ameren Missouri implemented its AEG Vision tracking system.

Challenges:

- The current planning and implementation process for demand-side resources may span up to five years and includes: 1) conducting a DSM market potential study; 2) conducting Chapter 22 Electric Utility Resource Planning; 3) preparing, filing and receiving approval for a MEEIA application; 4) developing new contracts for DSM programs' services; and 5) delivering program services and performing/reporting EM&V. During any five-year period there can be profound changes in energy markets and efficiency technology which can render any of these processes less than optimal.
- EM&V has been a very challenging and contentious process.

Summary Comments:

For the second MEEIA program year, from January 1, 2014 through December 31, 2014, the Business Energy Efficiency Program expended \$14,776,246 with 144,510 MWh of deemed annual energy savings and the Residential Energy Efficiency Program expended \$22,181,714 with 217,404 MWh of deemed annual energy savings. Additional expenditures include: \$1,880,086 for EM&V and \$2,680,043 for Ameren Missouri portfolio administration. Program level information for 2014 is in Attachment A.

Ameren Missouri also provided \$1.20 million for the Missouri Low-Income Weatherization Program during 2014 program year. This program is administered by the MO-DE, and the funds for this program are administered by the State Environmental Improvement and Energy Resource Authority ("EIERA"). The current evaluation was completed by July 31, 2015.

On December 22, 2014, Ameren Missouri filed its application for approval of its 2016 – 2018 Energy Efficiency Plan in Case No. EO-2015-0055.

Kansas City Power & Light Company

Prepared by: John Rogers and Jason Huffman

Date: August 14, 2015

Collaborative Name and Description: On July 28, 2005, the Commission approved the KCPL Experimental Regulatory Plan embodied in the Stipulation and Agreement filed in Case No. EO-2005-0329. The Commission ordered the Stipulation and Agreement's signatory parties to abide by all of the terms and requirements contained therein, including the creation of the KCPL Customer Programs Advisory Group (CPAG). With the Commission's *Report and Order* in Case No. ER-2010-0355, the CPAG requirement ended, and KCPL decided the CPAG name would no longer be used. It is now referred to as the DSM Advisory Group (DSMAG).

Meetings: Both KCPL's and KCP&L Greater Missouri Operations Company's (GMO) DSMAG normally conduct quarterly joint meetings via teleconference lasting about two hours with occasional in-person meetings in Jefferson City.

Participants:

- Regular: KCPL, Staff, OPC, MO-DE, NRDC, Sierra Club, Earth Island Institute d/b/a Renew Missouri, MIEC, Wal-Mart Stores East, L.P., and Sam's East.²
- Occasional: Praxair, Inc., City of Kansas City, the Empire District Electric Company.
- Consultants: Navigant.
- Commission EMV Auditor: Johnson Consulting Group.

Program Summaries: See Attachment B.

Effectiveness of Participants: KCPL encourages participation and critical feedback. All participants freely express their points of view and provide advice.

Success Stories:

• KCPL achieved the demand-side management goals established in its Experimental Regulatory Plan in Case No. EO-2005-0329.

KCPL/GMO contracted with Navigant to perform a DSM Market Potential Study which
was published in August 2013. Stakeholder input was received during the planning,
review and editing phases of the study. The results of the DSM Market Potential Study
were used to analyze demand-side resources in KCPL's Chapter 22 annual update filings,
File No. EO-2014-0256, filed on March 20, 2014.

² Signatories to the Commission-approved *Non-Unanimous Stipulation and Agreement Resolving KCP&L Greater Missouri Operations Company's MEEIA Filing*, File No. EO-2012-0009.

• On January 7, 2014, KCPL filed in File No. EO-2014-0095 a MEEIA application. On June 5, 2014, the Commission approved a stipulation and agreement containing 12 MEEIA programs for implementation beginning July 6, 2014, or on the effective date of the tariff sheets for the MEEIA programs, if the effective date is other than July 6, 2014. The Commission also approved a DSIM which addresses recovery of MEEIA programs' costs, estimated lost margin revenues and an earned Performance Incentive Award based on after-the-fact verified energy savings from the programs.

Challenges:

- The current planning and implementation process for demand-side resources may span up to five years and includes: 1) conducting a DSM market potential study; 2) conducting Chapter 22 Electric Utility Resource Planning; 3) preparing, filing and receiving approval for a MEEIA application; 4) developing new contracts for DSM programs' services; and 5) delivering program services and performing and reporting EM&V. During any five-year period there can be profound changes in energy markets and efficiency technology which can render any of these processes less than optimal.
- EM&V has been a very challenging and contentious process.

Summary Comments: During the first two quarters of 2014, KCPL's Commercial and
Industrial Pre-MEEIA DSM programs' expenditures were ** ** with 13,002 MWh
of deemed annual energy savings and the Residential Pre-MEEIA DSM programs' expenditures
were ** ** with 918 MWh of deemed annual energy savings. After KCPL's
implementation of its MEEIA portfolio, it expended ** ** on its Commercial and
Industrial programs, which resulted in deemed energy savings of 15,715 MWh, and
** ** on its Residential programs which resulted in deemed energy savings of
25,825 MWh. Pre-MEEIA and MEEIA Program level information for 2014 are summarized in
Attachment B.

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KCP&L Greater Missouri Operations Company

Prepared by: John Rogers and Jason Huffman

Date: August 14, 2015

Name and Description: GMO DSM Advisory Group was originally formed to provide suggestions and advice to the Company on DSM programs selection and other issues with a funding goal of one percent of annual revenues to implement cost-effective energy efficiency programs by 2010 as ordered and approved in the stipulation and agreements in Case Nos. ER-2007-0004 and EO-2007-0298.

Meetings: GMO and KCPL DSM Advisory Groups normally conduct a quarterly joint meeting via teleconference lasting about two hours with occasional in-person meetings in Jefferson City. The current stakeholder meetings' process is described in paragraph 13 of the Commission-approved *Non-Unanimous Stipulation and Agreement Resolving KCP&L Greater Missouri Operations Company's MEEIA Filing*, File No. EO-2012-0009.

Participants:

- Regular: GMO, Staff, OPC, MO-DE, NRDC, Sierra Club, Earth Island Institute d/b/a Renew Missouri, MIEC, Wal-Mart Stores East, L.P., and Sam's East.³
- Occasional: Praxair, Inc., and Empire Electric District.
- Consultants: Navigant.
- Commission EMV Auditor: Johnson Consulting Group.

Programs Summaries: See Attachment C.

Effectiveness of Participants: GMO encourages participation and critical feedback. All participants freely express their points of view and provide advice.

Success Stories:

• GMO made its initial MEEIA filing on December 22, 2011, in File No. EO-2012-0009. A non-unanimous stipulation and agreement was filed on October 29, 2012, and approved by the Commission on November 15, 2012. Implementation of fifteen MEEIA DSM programs began January 26, 2013, as a result of the Commission's Report and Order in Case No. ER-2012-0175. A demand-side programs investment mechanism (tracker) approved in Case No. ER-2012-0175 allows for recovery of demand-side programs' costs and recovery of estimated "lost" margin revenues as a result of the DSM programs and will allow the Company to earn a future performance incentive award based on after-the-fact verified energy savings from the programs.

³ Signatories to the Commission-approved Non-Unanimous Stipulation and Agreement Resolving KCP&L Greater Missouri Operations Company's MEEIA Filing, File No. EO-2012-0009.

- KCPL/GMO contracted with Navigant to perform a DSM Market Potential Study which
 was published in August, 2013. Stakeholder input was received during the planning,
 review and editing phases of the study. The results of the DSM Market Potential Study
 were used to analyze demand-side resources in KCPL's Chapter 22 annual update filings,
 File No. EO-2014-0256, filed on March 20, 2014.
- Having combined meetings of the KCPL and GMO DSM Advisory Groups has proven to be a very efficient and effective way for stakeholders to provide advice on KCPL and on GMO demand-side programs.

Challenges:

- The current planning and implementation process for demand-side resources may span up to five years and includes: 1) conducting a DSM market potential study; 2) conducting Chapter 22 Electric Utility Resource Planning; 3) preparing, filing and receiving approval for a MEEIA application; 4) developing new contracts for DSM programs' services; and 5) delivering program services and performing and reporting EM&V. During any five-year period there can be profound changes in energy markets and efficiency technology which can render any of these processes less than optimal.
- EM&V has been a very challenging and contentious process.

Summary	Comments:	During	2014,	the t	total	GMO'	's	Comm	ercial	and	Industria	l DSM
programs'	expenditures	were **_		*	* wi	th 18,1	178	MW	of of	deeme	d annual	energy
savings and	d the Resider	tial DSM	prograi	ms' e	expe	nditures	s w	ere **	:		** with	39,462
MWh of de	eemed annual	energy sav	ings. P	rogra	am le	evel info	orn	nation	for 20)14 is	in Attach	ment C.

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The Empire District Electric Company

Prepared by: John Rogers and Jason Huffman

Date: August 14, 2015

Name and Description: DSM Advisory Group was ordered and approved as part of the Global Agreement in File No. ER-2011-0004 and replaced the former Customer Programs Collaborative.

Meetings: DSM Advisory Group meetings are normally held quarterly via teleconference.

Participants:

- Regular: Empire, Staff, OPC, MO-DE, and Dogwood Energy, L.L.C.
- Occasional: Praxair and Missouri Joint Municipal Electric Utility Commission.
- Consultants: Applied Energy Group.
- Commission EMV Auditor: Johnson Consulting Group.

Programs Summaries: See Attachment D.

Effectiveness of Participants: Empire encourages participation and critical feedback from DSM Advisory Group members. All participants freely express their points of view and provide advice.

Success Stories:

- DSM Advisory Group has functioned well and has made timely changes to program designs as a result of lessons learned and EMV reports.
- Empire contracted with Applied Energy Group to perform a DSM Market Potential Study which was published in Empire's Chapter 22 triennial compliance filing, File No. EO-2013-0547, filed on July 1, 2013, and in its annual update filings, File No. EO-2014-0243, filed on March 11, 2014.

Challenges:

• Empire filed its first MEEIA application on February 28, 2012, in File No. EO-2012-0206. Empire withdrew is first MEEIA application on July 5, 2012. Empire filed its second MEEIA application on October 29, 2013, in File No. EO-2014-0030. Empire filed a Motion to Withdraw its MEEIA Application and Request for the Docket to be Closed on July 24, 2015. However, as part of a stipulation and agreement approved by the Commission in Case No. ER-2014-0351 parties agreed "With the exception of the low-income weatherization program [] Empire will continue its current energy efficiency programs, at current funding levels and with the current recovery mechanism, until

Empire has an approved MEEIA or until the effective date of rates in Empire's next general rate case."

- Empire will continue its current low-income weatherization program, with an annual budget of \$225,000. If the budget amount is not spent in any given Empire budget year, the balance will roll over to be spent in a future Empire budget year. On a going forward basis, the low-income weatherization program is not a "demand-side measure" or program for purposes of RSMo. 393.1075.7. Costs for this program are built into and will be recovered through the agreed-upon revenue requirement."
- Empire's last Chapter 22 integrated resource analysis in File No. EO-2013-0547 found that Empire's "No DSM" alternative resource plan has the lowest long-run utility cost (20-year present value of revenue requirements).

Summary Comments:

Empire spent a total of \$1,122,556 for demand-side programs during 2014 and achieved 4,116 MWh of deemed annual energy savings. Program level information for 2014 is in Attachment D.

Ameren Missouri - Natural Gas

Prepared by: Kory Boustead and Henry Warren

Date: August 14, 2015

Collaborative Name and Description: The Energy Efficiency Advisory Group ("EEAG") was initially established by the Commission in Case No. GR-2003-0517 and continued in Case No. GR-2007-0003 and called the Residential and Commercial Energy Efficiency Collaborative. Ameren Missouri Gas agreed to have two meetings annually. In Case No. GR-2010-0363, the advisory group was continued and renamed The Energy Efficiency Advisory Group.

Meetings: Held bi-annually either at Ameren Missouri's offices or by conference call.

Participants:

• Regular: Ameren Missouri Gas, Staff, OPC, and MO-DE,

Program Summaries: See Attachment E

On September 22, 2014, the company filed a tariff submission to make minor changes to the Natural Gas Home Energy Performance (HEP) Pilot program that became effective March 1, 2013. It is a joint program with the company's residential electric energy efficiency program with the same name. The HEP Pilot was first approved as a joint utility approach under the Company's MEEIA tariff filing Case No. EO-2012-0142. The changes were discussed with the program stakeholders who approved AMMO making the tariff filing.

The tariff changes include:

- 1. Changing the program name to Home Energy Analysis (HEA) Pilot from Home Energy Performance Pilot;
- 2. Removing Smart Strips from the measure to be directly installed;
- 3. Referring to the ActOnEnergy website for Rebate procedures;
- 4. Clarifying the name for the Department of Natural Resources;
- 5. Increasing the amount of Pipe Wrap that can be installed;
- 6. Adding windows as a Qualifying Measure with an initial rebate level as well as a rebate range; and
- 7. Adding transition language to allow the gas and electric HEA programs to implement changes at the same time.

On December 2, 2014 Ameren Missouri filed a tariff substitution for its Natural Gas Home Equipment and Building Shell Measure Rebate Programs.

The tariff changes include:

- 1. Clarifying the definition of Qualified Auditor;
- 2. Adding a definition for Air Changes per hour;
- 3. Clarifying the Availability section;

- 4. Updating Efficiency Requirements for Residential Furnaces; and
- 5. Extending the Term Through December 31, 2015

In accordance with Case No. GR-2010-0363 Unanimous Stipulation and Agreement paragraph 6.G, Ameren Missouri believes these tariff changes are appropriate.

Weatherization

Ameren Missouri Gas provided \$263,000 to the Environmental Improvement and Energy Resources Authority (EIERA) for a residential weatherization grant program, including energy education, for primarily lower income customers. The program is administered by the MO-DE and funds distributed by EIERA to the seven community action agencies serving Ameren's gas customers. The list of agencies and how many homes weatherized for 2014 is:

Agency	Total Homes
Delta Area Economic Opportunity Corp.	5
East Missouri Action Agency	6
Central Missouri Community Action	45
Missouri Ozarks Community Action	3
North East Community Action Agency	7
South Central Missouri Community Action Agency	1
West Central Missouri Community Action Agency	1
GRAND TOTAL	68

Evaluations: Ameren Missouri Electric has contracted with Evergreen Economics to perform an EM&V on the Low-Income Weatherization Assistance Program which will include information from Ameren Missouri Gas Low-Income Weatherization Program. It was completed by July 31, 2015.

Relevant Cases: EO-2012-0142; GR-2010-0363; ER-2014-0258

2014 Program Expenditures: \$606,600 from January 1, 2014 – December 31, 2014, out of a budget of \$700,000 per the Stipulation and Agreement in Case No. GR-2010-0363 with \$263,000 forwarded to the EIERA for low-income weatherization.

2015 Program Expenditures: Program year January 1, 2015 to December 31, 2015 with a budget of \$700,000 per the Stipulation and Agreement in Case No. GR-2010-0363 with \$263,000 forwarded to the EIERA for low-income weatherization. No program expenditures submitted for 1st quarter 2015 as of the time of this report.

Laclede Gas Company

Prepared by: Kory Boustead and Henry Warren

Date: August 14, 2015

Collaborative Name and Description: The Energy Efficiency Collaborative ("EEC"). Effective July 8, 2013, the Commission approved a stipulation and agreement in Laclede's rate case, Case No. GR-2013-0171, that continues the Company's Conservation and Energy Efficiency Programs that began with the Stipulation and Agreement in Case No. GR-2007-0208. Funding level goals for the programs have been updated so that beginning with the 12-month period effective October 1, 2013, target funding will be 0.5% of the annual average of the Company's Missouri jurisdictional gas distribution operating revenues for the Laclede Gas service division including cost of gas for Residential, Commercial and Industrial, and Interruptible customers for fiscal years ending 2010, 2011, and 2012. For the 12-month period beginning each October 1 thereafter, target levels will be updated to 0.5% of the moving average of these revenues for the three previous years.

Meetings: The Laclede Gas EEC and the Missouri Gas Energy Advisory Group combined as one in early 2014 and meet quarterly at Laclede Gas Company offices, in Jefferson City or by conference call for 4-5 hours.

Participants: Regular: Laclede, Staff, OPC, MO-DE

Programs Summaries: See Attachments F & G

October 1, 2014 began the seventh consecutive year of providing uninterrupted cost-effective energy efficiency rebate programs to Laclede residential and commercial/industrial customers. Charter members of the Laclede EEC continue to work together in an effort to maintain and expand a portfolio of cost-effective conservation and energy efficiency programs that can benefit all of Laclede's customers. These programs serve to educate customers and encourage installation of energy saving, environmentally-friendly natural gas equipment and measures.

Since the closing on the acquisition of Missouri Gas Energy (MGE) in September 2013, the Laclede and MGE Energy Efficiency Collaboratives (EECs) have implemented best practices for providing energy efficiency programs to both utility service territories. Beginning in February 2014 both Collaboratives began to meet as one to better facilitate discussions for both utility programs. Each utility will continue to provide programs best suited for their individual service territories together with individual budgets as set forth in approved Stipulation and Agreements. Energy efficiency program year calendars were adjusted so that each utility's energy efficiency budget is established consistent with utility fiscal year periods. Furthermore, where there are similar programs in place, the Laclede and MGE EEC will work toward integrating program administration.

With the approval of the MGE rate case (Case No. GR-2014-0007) on May 1, 2014, the MGE EEC was granted approval to provide commercial and industrial energy efficiency rebates to MGE customers that mirror those of Laclede. During spring 2014, the EECs issued an RFP seeking to hire rebate program contractors to administer the C&I rebate program as well as the residential rebate programs. In June 2014, the Laclede and MGE EEC reached consensus to hire Applied Energy Group to administer the Laclede and MGE C&I rebate programs and Energy Federation Incorporated to administer the Laclede and MGE residential rebate programs. Contracts with both companies were executed in August and the programs began on October 1, 2014.

Laclede EEC continues to focus its attention on partnership with Ameren Missouri electric to codeliver energy efficiency programs that benefit customers of both utilities. One such program is the residential direct-install low income program. Marking the end of its first full year in December, the *Community Savers* Program has successfully provided space-heating and watersaving direct-install measures to 37 multifamily properties with a total of 3,111 federally-subsidized dwelling units. Measures that include energy efficient faucet aerators, energy efficient showerheads, water heater pipe insulation, and programmable thermostats are installed in multifamily units. The amount of funding contributed by each utility is dependent on the fuel source to the impacted appliances. Ameren Missouri and Laclede worked successfully to develop co-branded educational materials used in the Program. It is intended that cost-sharing benefits for program delivery will be obtained by both utilities. The *CommunitySavers* Program will run until December 31, 2015, and may expand in 2016 to include low income single-family dwellings.

On February 1, 2014, Laclede entered into a contract with the Urban League of Metropolitan St. Louis to provide the same direct-install income qualified program to customers within federally subsidized multifamily properties that previously received electric energy-saving measures under the *CommunitySavers* program but did not receive the gas energy-saving measures due to the fact that Laclede was not yet offering the program. This effort brought gas energy saving measures to qualifying multifamily dwelling units that had been bypassed by the electric program. Through the *Multifamily Simple Savings Program*, those multifamily properties that elect to take part are now receiving programmable thermostats, energy efficient faucet aerators, energy efficient showerheads, and water heater pipe insulation as long as the appliances are still fueled by natural gas. Since February the program has provided measures to 16 multifamily properties and a total of 1,376 dwelling units. The *Multifamily Simple Savings Program* ran through July 31, 2015.

In October 2014, the Laclede EEC agreed to extend the contract with Aclara Technologies to continue providing an Online Energy Audit for Laclede's residential customers. The online energy audit, called *Home Energy Advisor*, is an online audit tool on Laclede's website that is available to all Laclede residential customers. *Home Energy Advisor* encourages customers to set savings goals and implement energy efficiency projects and conservation measures within their homes while enabling them to track results. The contract extension is for one year and will expire in October 2015. MGE has a similar online energy tool through Apogee. During the next several months, the Laclede and MGE EEC will work to integrate both online tools into one

platform through a single contractor. During 2015 the Laclede and MGE EECs will embark on a comprehensive energy efficiency marketing and education plan with the objective of educating customers on the value of energy efficiency, increasing participation, improving program mechanics and messaging, and strengthening relationships with trade allies.

During the winter of 2014-15, the Laclede and MGE EECs solicited the assistance of Applied Energy Group to conduct a comprehensive analysis to evaluate the cost effectiveness of new measures along with modified rebates to be incorporated into the residential and C&I programs. The timing for the analysis was critical due to the looming changes to the minimum efficiency standards established by the Department of Energy for residential water heaters, which were scheduled to take effect in April 2015. The Laclede and MGE EECs collaborated on the results of the analysis and came to an agreement to submit revised tariffs for the Laclede and MGE residential and C&I rebate programs. The revised tariffs were approved by the Commission effective May 1, 2015. These tariffs adjusted rebates for residential water heaters to account for the higher minimum efficiency standards imposed by the DOE, and completely aligned residential measures and rebates offered at Laclede and MGE. In addition, the changes expanded the measures offered within the Laclede and MGE C&I programs and increased the rebate limit (cap) for C&I customers The updated programs greatly enhance the opportunities Laclede and MGE customers have to implement energy efficient equipment and provide greater incentive for even more customers to participate in the programs.

Weatherization

This program is designed to provide energy education and weatherization assistance to low-income residential customers to assist in reducing the energy consumption and thus reducing their natural gas utility bill. The Company shall provide \$950,000 annually in assistance for the benefit of eligible low-income customers of the Company who use natural gas for space heating.

Agency	Total Homes
East Missouri Action Agency	2
Urban League of Metro St Louis	24
Jefferson-Franklin Community Action Corp.	15
Community Action Agency of St Louis County	152
North East Community Action Agency	20
South Central Missouri Community Action Agency	1
GRAND TOTAL	214

Laclede MGE Division Weatherization

This program is designed to provide energy education and weatherization assistance to low-income residential customers to assist in reducing the energy consumption and thus reducing their natural gas utility bill. The Company shall provide \$750,000 annually in assistance for the benefit of eligible low-income customers of the Company who use natural gas for space heating.

Agency	Total Homes
Community Services Inc.	10
Economic Security Corporation	48
Missouri Valley Community Action Agency	10
Ozarks Area Community Action Corporation	23
United Services Community Action Agency	10
South Central Missouri Community Action Agency	1
GRAND TOTAL	214

Relevant Cases: GR-2013-0171; GR-2013-0007; GR-2014-0007

Laclede Division

2014 Program Expenditures: Program Year October 1 2013 – September 30 2014, total amount budgeted for program year was \$4,235,000 with \$950,000 of the budget forwarded to EIERA for low-income weatherization. Total amount of the non-low-income budget spent was \$2,930,100 as of September 30, 2014.

2015 Program Expenditures: Program Year October 1 2014 – September 30 2015, total amount budgeted for program year is \$3,732,040 with \$950,000 of the budget forwarded to EIERA for low-income weatherization. Total amount of the non-low-income weatherization budget spent was \$1,877,458 as of March 31, 2015.

MGE Division

2014 Program Expenditures: Program Year is October 1, 2013 to September 30, 2014; the total budget for program year was \$3,468,500 with \$750,000 forwarded to EIERA for low-income weatherization. Total amount of the non-low-income weatherization budget spent was \$1,821,820 as of September 30, 2014.

2015 Program Expenditures: Program Year is October 1, 2014 to September 30, 2015: the total budget is \$3,400,300 with \$750,000 forwarded to EIERA for low-income weatherization. Total amount of the non-low-income weatherization budget spent as of December 31, 2014 was \$935,650.

Evaluations: Applied Energy Group did a comprehensive analysis to evaluate the cost effectiveness of new measures along with modified rebates to be incorporated into the residential and C&I programs for Laclede Division and MGE Division.

Relevant Cases: GM-2013-0254, GR-2014-0007

Liberty Utilities

Prepared by: Kory Boustead and Henry Warren

Date: August 14, 2015

Collaborative Name and Description: Energy Efficiency Advisory Group was authorized by the Commission in the Report and Order in Case No. GR-2006-0387 during which time, Atmos Utilities was the natural gas carrier for the area. It was originally named The Energy Efficiency Collaborative. With the approval of the programs to continue in Case No. GR-2010-0192 it was then renamed The Energy Efficiency Advisory Group (EEAG). In Case No. GR-2014-0152 in the Non-Unanimous Second Partial Stipulation, the programs were agreed to continue on an annual basis at the same funding level of \$150,000 included in base rates with \$105,000 (of the \$150,000) for the Residential Low-Income Weatherization Assistance Program.

Meetings: Held bi-annually in person within one of the stakeholders offices for 2 hours.

Participants: Regular: Liberty, Staff, OPC, DOE

Programs Summary: See Attachment H

Effectiveness of Participants: Liberty Utilities encourages participation and critical feedback. All participants freely express their points of view and provide advice.

Customer Education

To further the customer education component Liberty Utilities chose to partner with the EarthWays Center, which is a division of the Missouri Botanical Garden in St. Louis. EarthWays Center staff worked with Liberty Utilities and the state Regional Professional Development offices to coordinate three energy educator workshops. These workshops were designed as summer professional development opportunities, and were conducted in each of the three Liberty Utilities service territories. The attached "Liberty Utilities Energy Education Workshops 2014-2015 Final Report" was recently submitted by the EarthWays Center (dated July 27, 2015), and provides additional details regarding the program and its many accomplishments. As fully discussed in the Final Report, the program is beginning to show strong growth and feedback from attendees is highly positive. Liberty Utilities is pleased with the progress of this particular program.

Program Report: See Attachment I

Weatherization

Liberty Utilities provided \$105,000 to the Environmental Improvement and Energy Resources Authority (EIERA) in September of 2014. Funds were distributed by EIERA and the Missouri Division of Energy to the six community action agencies serving our customers.

Agency	Total Homes
Delta Area Economic Opportunity Corp.	13
East Missouri Action Agency	4
Jefferson-Franklin Community Action Corp.	4
Community Action Agency of St Louis County	5
North East Community Action Corp.	3
South Central Missouri Community Action Agency	2
GRAND TOTAL	31

Evaluations: None

Relevant Cases: GR-2014-0152

2014 Program Expenditures: Program Year September 1, 2013 – August 31, 2014; total amounted budgeted for program year \$288,787 (0.5% of gross operating revenues) with \$105,000 of the budget forwarded to EIERA for low-income weatherization. Total amount of the non-low income weatherization budget spent \$174,034.

2015 Program Expenditures: Program Year September 1, 2014 – August 31, 2015; total budget is \$259,904 (0.5% of gross operating revenues) with \$105,000 being forwarded to EIERA for low-income weatherization.

Empire District Gas

Prepared by: Kory Boustead and Henry Warren

Date: August 14, 2015

Collaborative Name and Description: The Demand Side Management Group was established in a Unanimous Stipulation and Agreement in Case No. GR-2004-0072. Originally it was established to have meetings or conference calls twice a year to provide input on the energy efficiency programs, but in recent years, it has been meeting quarterly. The Company is to file annual reports with the Commission. The Company has also been filing reports quarterly as that is how their budget is broke up annually.

Meetings: Held quarterly through webcast for 2 - 3 hours.

Participants:

• Regular: Empire District Gas, Staff, OPC, and MO-DE

Program Summaries: See Attachment J

Empire is in year five of its energy efficiency portfolio. Empire's initial energy efficiency portfolio was in effect from April 1, 2010 to March 31, 2013. As of April 1, 2013, Empire revised the tariffs for these programs for a second three-year period, which will be from April 1, 2013 to March 31, 2016.

The advisory group continues to examine the growth of the current programs to see if any adjustments or changes should be made. Empire tracks and reports its program progress quarterly.

Low-Income Weatherization Program

The Low-Income Weatherization Program involves four community action agencies. For the full program year of April 1, 2014 to March 31, 2015, a total of 15 homes were weatherized, compared to Empire's goal of 40 homes. The four community action agencies used \$20,992 of Empire funds to do this, which resulted in an estimated total savings of 491 MCf.

Summary

Evaluations: None

Relevant Cases: None

2014 Program Expenditures: Program Year April 1, 2013 – March 31, 2014; total amount budgeted for program year 4 \$242,430 with \$75,000 of the budget forwarded to EIERA for low-income weatherization. Total amount of the non-low-income weatherization budget spent \$50,768.

2015 Program Expenditures: Program Year April 1, 2014 – March 31, 2015; total amount budgeted for program year \$242,430 with \$75,000 of the budget forwarded to EIERA for low-income weatherization. Total amount of the non-low income weatherization budget spent \$63,441.

Summit Natural Gas

(Formerly Southern Missouri Natural Gas and Missouri Gas Utility)

Prepared by: Kory Boustead and Henry Warren

Date: August 14, 2015

Collaborative Name and Description: Summit Utilities Energy Efficiency Advisory Group ("EEAG") was authorized in the Partial Stipulation and Agreement as to Energy Efficiency, Weatherization and other Matters in Case No. GR-2014-0086 with the goal of working toward development and implementation of a viable energy efficiency program. Summit Natural Gas will work with the EEAG to take reasonable actions toward a target of achieving all cost-effective energy efficiency programs. The Company shall provide updates on: (1) the status of program design and implementation including the amount of expenditures for each program and the level of customer participation, (2) the status of program evaluations including consultants chosen, evaluation budgets, evaluation expenditures and copies of any interim and final evaluations, and (3) the status of new program selection and design efforts.

Meetings: Held bi-annually in person or by conference call for 2-3 hours.

Participants:

• Regular: Summit Natural Gas, Staff, OPC, MO-DE

The Company held the first EEAG meeting on March 30, 2014. Initial discussions took place on types of programs to offer and how to overcome the diverse areas for energy efficiency given the patchwork of the Companies territory in the State. The Commission also authorized the start of the Low-Income Weatherization Program where the Company will provide \$30,000 annually, divided among the divisions in proportion to the number of residential customers in each division. At this time there are no energy efficiency programs being discussed and Summit hopes to establish them in the near future.

Relevant Cases: GR-2014-0086

Natural Gas Investor Owned Utility Energy Efficiency Collaborative Meeting

Prepared by: Kory Boustead

On May 14, 2015 MO-DE was host to the first Missouri investor-owned natural gas utilities' energy efficiency collaborative meeting at the Truman State Office Building. In attendance were Ameren Missouri Gas, Empire District Gas, Liberty Utilities, Laclede Gas Company (representatives from Laclede Division and MGE Division were present). Summit Natural Gas was unable to have a presence at this meeting due to a schedule conflict.

This was an informal forum to discuss utilities' natural gas energy efficiency experiences, share insights on efficiency programs and strategies; and, thoughts about natural gas energy efficiency for the future.

The participants were all very involved in the 5 hour meeting and all provided their thoughts and suggestions on how to attain viable cost effective energy efficiency programs for each company. This is thought to be an annual collaborative meeting however there is not a tentative date for the next at this time.

Effectiveness of Energy Efficiency Advisory Groups and Collaboratives

Prepared by: Kim Cox and Curt Gateley

In response to the request for a review of the effectives of the various energy efficiency advisory groups and collaboratives we have observed six collaborative meetings since February 2015.

- 1. Empire Quarterly Demand-Side Management and Energy Efficiency Advisory Group, April 30, 2015 and July 24, 2015;
- 2. Natural Gas Missouri IOU Energy Efficiency Collaborative, May 14, 2015;
- 3. 1st Quarter Ameren Missouri Energy Efficiency Regulatory Stakeholder Advisory Team Meeting, May 20, 2015;
- 4. KCP&L/GMO Quarterly DSMAG meeting, May 21, 2015 and
- 5. KCP&L/GMO MEEIA Cycle 2 Stakeholder webinar, June 29, 2015.

There have been no meetings of the Electric Utility Statewide Collaborative so far this year. Due to the nature of this request, and the frequency of meetings, we are not able to provide a conclusion as to each collaboratives individual effectiveness at this time. The meetings thus far have been well attended with open dialogue among the parties. We will continue to observe the advisory groups and collaboratives and provide updates as appropriate.

for A S	latter of the Cha tatus Report Re cy Advisory ratives	garding Er))	File No. AO-2011-0035
		AFFIDAV	IT OF JO)HN A.]	ROGERS
	OF MISSOUR Y OF COLE) ss			
and lawf	COMES NOW Journal of the control of	ontributed to	o the attac	hed Stat	h declares that he is of sound mind us Report; and that the same is true
F	urther the Affian	nt sayeth no	t.		John A. Rogers
Subscribe	ed and sworn to	before me t	his 14th	lay of A	ugust, 2015.
	SUSAN L. SUNDER Notary Public - No State of Miss Commissioned for Call My Commission Expires: O	tary Seal		Du	Notary Public

In the Matter of the Chairman's for A Status Report Regarding Efficiency Advisory Group Collaboratives	g Energy)))	File No. AO-2011-0035
AFFID	AVIT OF JAS	SON HUF	FMAN
STATE OF MISSOURI) s COUNTY OF COLE)	s		
COMES NOW Jason Hu and lawful age; that he contribut and correct according to his best	ed to the attach	ned Status I	eclares that he is of sound mind Report; and that the same is true
Further the Affiant sayet	h not.		
		1	Jason Huffman
Subscribed and sworn to before	me this 14th d	ay of Augu	st, 2015.
SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway Coun My Commission Expires: October 28, 2 Commission Number: 14942086	ity 2018 3	Susa	Notary Public

In the Matter of the Chairman's Request for A Status Report Regarding Energy Efficiency Advisory Groups and Collaboratives)	File No. AO-2011-0035
AFFIDAVIT	OF KORY	Y BOUSTEAD
STATE OF MISSOURI)) ss) COUNTY OF COLE)		
5	o the attacl	r oath declares that she is of sound mind hed Status Report; and that the same is and belief.
	_	Korry Bousteal Kory Boustead
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SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 28, 2018 Commission Number: 14942086	/	Ausa Afundumeyer Notary Public

In the Matter of the Chairman's Request for A Status Report Regarding Energy Efficiency Advisory Groups and Collaboratives)) File No. AO-2011-0035)
AFFIDAVIT OF I	HENRY WARREN
STATE OF MISSOURI)) ss) county of cole)	
COMES NOW Henry Warren, and and lawful age; that he contributed to the att and correct according to his best knowledge	on his oath declares that he is of sound mind ached Status Report; and that the same is true and belief.
Further the Affiant sayeth not.	Jonny En circe Henry Warren
Subscribed and sworn to before me this 14th	day of August, 2015.
SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 28, 2018 Commission Number: 14942086	Susan A Sundermeye Notary Public

In the Matter of the Chairm Request for A Status Re Regarding Energy Efficie Advisory Groups Collaboratives	eport)	File No. AO-2011-0035	;
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COMES NOW Kim Collawful age; that she contribute and correct according to her be Further the Affiant saye	ed to the attached s	~ *	
		Kim Cox	
Subscribed and sworn to before SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway Count My Commission Expires: October 28, 2		y of August, 2015. Muser Motary Public	reger

In the Matter of the Chairman's Request for A Status Report Regarding Energy Efficiency Advisory Groups and Collaboratives))	File No. AO-2011-0035
AFFIDAVIT OF C	URT G	ATELEY
STATE OF MISSOURI)) ss) county of cole)		
COMES NOW Curt Gateley, and on and lawful age; that he contributed to the attacand correct according to his best knowledge and	hed Stat	tus Report; and that the same is true
Further the Affiant sayeth not.		
	6	Sales Curt Gateley
		Curt Galeicy
Subscribed and sworn to before me this 14th d	lay of A	ugust, 2015.
SUSAN L. SUNDERMEYER Notary Public - Notary Seal State of Missouri Commissioned for Callaway County My Commission Expires: October 28, 2018 Commission Number: 14942086	Su	Motary Public

DSM Advisory Group Annual Report: Programs' and Portfolio Costs vs. Targets

Utility: Ameren Missouri

Report Date: 02/26/2015

Period: 01/02/14 - 12/31/14

Portfolio Start Date: 01/02/2013

Programs' Costs (Recorded)	57	TH QUARTER	61	TH QUARTER	7	TH QUARTER	81	TH QUARTER	2N	D YTD TOTAL
Standard	\$	672,919	\$	753,614	\$	1,012,033	\$	1,476,760	\$	3,915,326
Custom	\$	1,740,745	\$	2,557,712	\$	2,162,207	\$	1,058,109	\$	7,518,772
Retro-commissioning	\$	302,202	\$	98,058	\$	127,091	\$	1,218,867	\$	1,746,218
New Construction	\$	90,851	\$	488,899	\$	628,300	\$	387,880	\$	1,595,930
Business Subtotal	\$	2,806,716	\$	3,898,283	\$	3,929,631	\$	4,141,617	\$	14,776,246
Lighting	\$	2,140,859	\$	2,253,042	\$	1,832,175	\$	1,645,208	\$	7,871,283
Energy Efficient Products	\$	559,215	\$	341,011	\$	305,059	\$	522,183	\$	1,727,468
HVAC	\$	1,099,643	\$	1,774,339	\$	2,596,960	\$	1,658,362	\$	7,129,305
Refrigerator Recycling	\$	174,720	\$	382,673	\$	469,036	\$	248,064	\$	1,274,493
Home Energy Performance	\$	73,557	\$	76,655	\$	95,531	\$	77,659	\$	323,401
New Homes	\$	105,251	\$	76,588	\$	93,253	\$	41,223	\$	316,315
Low Income	\$	465,657	\$	1,396,472	\$	808,179	\$	869,139	\$	3,539,448
Residential Subtotal	\$	4,618,903	\$	6,300,781	\$	6,200,192	\$	5,061,838	\$	22,181,714
EM&V Subtotal	\$	536,951	\$	302,839	\$	661,302	\$	378,995	\$	1,880,086
Portfolio Subtotal	\$	718,221	\$	1,198,447	\$	456,463	\$	306,913	\$	2,680,043
Quarterly Total Program	\$	8,680,792	\$	11,700,349	\$	11,247,587	\$	9,889,362	\$	41,518,090
Cumulative Total Program	\$	43,113,194	\$	54,813,543	\$	66,061,130	\$	75,950,492		
Programs' Energy Savings (MWh)	51	TH QUARTER	61	TH QUARTER	7	TH QUARTER	81	TH QUARTER	2N	D YTD TOTAL
Standard		6,937		8,315		10,493		13,130		38,875
Custom		13,314		24,188		21,915		20,957		80,374
Retro-commissioning		1,027		0		258		10,356		11,641
New Construction		385		4,640		5,077		3,518		13,620
Business Subtotal		21,663		37,144		37,743		47,960		144,510
Lighting		41,753		41,519		32,142		32,334		147,749
Energy Efficient Products		3,797		467		2,341		5,137		11,741
HVAC		6,253		10,423		16,798		8,740		42,214
Refrigerator Recycling		1,138		2,202		3,123		1,713		8,176
Home Energy Performance		150		136		192		173		650
New Homes		181		8		312		134		635
Low Income		1,028		1,892		1,470		1,849		6,240
Residential Subtotal		54,299		56,646		56,377		50,081		217,404
Quarterly Total Program (MWh)		75,962		93,790		94,120		98,042		361,915

Utility: KCPL - MO Territory Pre-MEEIA

Dashboard Report Date: 08/22/2014

Report Period: 01/01/2014 - 06/30/2014

Programs' Costs (Recorded)	Customer Segment	Quarter Ended 03/31/14	Quarter Ended 06/30/14	2014 YTD TOTAL
Air Conditioning Upgrade Rebate	Residential			
Building Operator Certification	Commercial			
Business Energy Analyzer	Commercial			
Business Energy Efficiency Rebates - Custom	Commercial	The	se Num	hers
Business Energy Efficiency Rebates - Standard	Commercial		se rium	ibel 5
Demand Response Incentive	Commercial			
ENERGYSTAR-Qualified New Homes	Residential			
Home Energy Analyzer	Residential	1		
Home Energy Report Pilot	Residential	Δ,	e Deem	ed
Home Performance Rebate with ENERGYSTAR	Residential]	C Deem	ica
Income-Eligible Weatherization	Residential	1		
Programmable Thermostat	Residential	1		
Multi-Family Energy Efficiency Rebate	Residential			
All Program Costs	Residential	Highly	v Confi	dential
Incremental All Programs' Costs			Highly Confid	
Cumulative All Programs' Costs				
Residential Cumulative Program Costs				
Commercial Cumulative Program Costs				

	Customer	Quarter Ended	Quarter Ended	
Programs' Costs (Recorded)	Segment	03/31/14	06/30/14	2014 YTD TOTAL
Air Conditioning Upgrade Rebate	Residential	135	396	531
Building Operator Certification	Commercial			0
Business Energy Analyzer	Commercial			0
Business Energy Efficiency Rebates - Custom	Commercial	5,524	7,453	12,977
Business Energy Efficiency Rebates - Standard	Commercial	17	8	25
Demand Response Incentive	Commercial			0
ENERGYSTAR-Qualified New Homes	Residential			0
Home Energy Analyzer	Residential			0
Home Energy Report Pilot	Residential			0
Home Performance Rebate with ENERGYSTAR	Residential	117	209	326
Income-Eligible Weatherization	Residential		61	61
Programmable Thermostat	Residential			0
Multi-Family Energy Efficiency Rebate	Residential			0
All Program Costs	Residential			0
Incremental All Programs' Costs		5,793	8,128	13,921
Cumulative All Programs' Costs		5,793	13,921	
Residential Cumulative Program Costs		252	666	918
Commercial Cumulative Program Costs		5,541	7,461	13,002

Utility: KCP&L-MO MEEIA	<u> </u>							
Annual Report Date: Marc	-							
•		04.4						
Report Period: 07/06/201	4 - 12/31/2	014						
Programs' Costs (Recorded)	Customer Segment	Quarter ended 09/30/2014						
Air Conditioning Upgrade Rebate	Residential							
Building Operator Certification	Commercial	1						
Business Energy Analyzer	Commercial	1						
Business Energy Efficiency Rebates - Custom	Commercial	The	aa Naraal	hana				
	Commercial	1 ne	se Num	bers				
Business Energy Efficiency Rebates - Standard		1						
Home Lighting Rebate	Residential							
Home Appliance Recycling Rebate	Residential							
Home Energy Analyzer	Residential		-	-				
Home Energy Report	Residential	. Ai	re Deem	ed				
Home Energy Report Income Eligible	Residential							
Income-Eligible Weatherization	Residential							
Programmable Thermostat	Residential]						
All Program Costs	Residential	1						
Incremental All Programs' Costs		Highl	y Confid	lential				
Cumulative All Programs' Costs			V					
Residential All Programs' Costs								
		1						
Commercial All Programs' Costs								
Programs' Energy Savings (MWh)	Customer Segment	Quarter ended 09/30/2014	Quarter Ended 12/31/2014	MEEIA 2014 Total				
Air Conditioning Upgrade Rebate	Residential	528	348	876				
Building Operator Certification	Commercial	-	1,974	1,974				
Business Energy Analyzer	Commercial	-	-	-				
Business Energy Efficiency Rebates - Custom	Commercial	4,117	9,505	13,622				
Business Energy Efficiency Rebates - Standard	Commercial	8	111	119				
Home Lighting Rebate Home Appliance Recycling Rebate	Residential	4,806	15,410	20,216				
Home Energy Analyzer	Residential Residential	74 -	151	224				
Home Energy Report	Residential	-	3,831	3,831				
Home Energy Report Income Eligible	Residential	-	674	674				
Income-Eligible Weatherization	Residential	2	2	4				
Programmable Thermostat	Residential	-	-	-				
All Program Costs	Residential	-	-	-				
Incremental Total Energy Savings (MWh)		9,534	32,006	41,540				
Cumulative Total Energy Savings (MWh)		9,534	41,540	41,540				
Residential Total Energy Savings (MWh)		5,409	20,415	25,825				
Commercial Total Energy Savings (MWh)		4,125	11,591	15,715				

Utility: KCPL - GMO MEEIA						
Report Date: 07/27/2015						
Portfolio Start Date: 01/27/2013						
Programs' Costs (Recorded)	Customer Segment	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER	2ND YTD TOTAL
Air Conditioning Upgrade Rebate	Residential		•	•	•	•
Building Operator Certification	Commercial					
Business Energy Analyzer	Commercial					
Business Energy Efficiency Rebates - Custom	Commercial					
Business Energy Efficiency Rebates - Standard	Commercial				_	
Demand Response Incentive	Commercial		These	3 13111	nhar	·C
ENERGYSTAR-Qualified New Homes	Residential	J	111020	J IIUI	$\Pi \cup \Box \Gamma$	S
Home Appliance Rebates	Residential					
Home Appliance Recycling Rebate	Residential					
Home Energy Analyzer	Residential		A	-	1	
Home Energy Report Pilot	Residential		Δre	Dee	med	
Home Lighting Rebate	Residential				IIICU	
Home Performance Rebate with ENERGYSTAR	Residential					
Income-Eligible Weatherization	Residential					
Multi-Family Energy Efficiency Rebate	Residential	TT.	1 1		C* 1	. • 1
Programmable Thermostat	Residential	H_{10}	ghly	('ant	tiden	itial
All Program Costs	Residential	1112	5111 y	COII		itiai
To Be Classified		_	•			
Incremental All Programs' Costs						
Cumulative All Programs' Costs						
Residential All Programs' Costs						
Commercial All Programs' Costs						

Programs' Energy Savings (MWh)	Customer Segment	1ST QUARTER	2ND QUARTER	3RD QUARTER	4TH QUARTER	2ND YTD TOTAL
Air Conditioning Upgrade Rebate	Residential	275	890	1,046	454	2,665
Building Operator Certification	Commercial	-	-	-	-	-
Business Energy Analyzer	Commercial	-	-	-	-	-
Business Energy Efficiency Rebates - Custom	Commercial	2,340	2,811	2,832	6,524	14,507
Business Energy Efficiency Rebates - Standard	Commercial	1,135	690	380	1,466	3,671
Demand Response Incentive	Commercial	-	-	-	-	-
ENERGYSTAR-Qualified New Homes	Residential	-	114	-	13	126
Home Appliance Rebates	Residential	550	836	1,601	716	3,703
Home Appliance Recycling Rebate	Residential	207	204	421	653	1,485
Home Energy Analyzer	Residential	-	-	-	-	-
Home Energy Report Pilot	Residential	-	4,335	2,963	1,984	9,282
Home Lighting Rebate	Residential	-	-	4,699	16,899	21,598
Home Performance Rebate with ENERGYSTAR	Residential	112	109	67	182	469
Income-Eligible Weatherization	Residential	-	41	23	70	134
Multi-Family Energy Efficiency Rebate	Residential	-	-	-	-	-
Programmable Thermostat	Residential	-	-	-	-	-
All Program Costs	Residential	-	-	-	-	-
Incremental Total Energy Savings (MWh)		4,618	10,029	14,032	28,960	57,639
Cumulative Total Energy Savings (MWh)		4,618	14,647	28,679	57,639	57,639
Residential Total Energy Savings (MWh)		1,143	6,529	10,820	20,970	39,462
Commercial Total Energy Savings (MWh)		3,475	3,500	3,212	7,990	18,178

Utility: Empire District Electric

Report Date: 04/30/2015

Portfolio Start Date:01/01/2014

Total Costs	1st	QUARTER	2nd	d QUARTER	3n	d QUARTER	4t	h QUARTER	2014 YTD TOTAL
ENERGY STAR® New Homes Program	\$	21,550	\$	2,911	\$	69,018	\$	1,200	\$ 94,679
High Efficiency AC Rebate Program	\$	33,400	\$	61,511	\$	68,718	\$	35,452	\$ 199,081
Home Performance with ENERGY STAR® Program	\$	-	\$	7,511	\$	17,818	\$	237	\$ 25,566
Low-Income New Homes	\$	-	\$		\$	-	\$	-	\$ -
Low-Income Weatherization	\$	-	\$	58,499	\$	56,269	\$	52,024	\$ 166,792
Building Operator Certification	\$	-	\$	-	\$	-	\$	-	\$ -
Commercial & Industrial Rebate Program	\$	88,956	\$	202,643	\$	161,515	\$	131,378	\$ 584,492
GENERAL	\$	66	\$	46,788	\$	529	\$	4,563	\$ 51,945
Incremental All Programs' Costs	\$	143,973	\$	379,863	\$	373,867	\$	224,853	\$ 1,122,556
Cumulative All Programs' Costs	\$	143,973	\$	523,836	\$	897,703	\$	1,122,556	\$ 1,122,556

Programs' Energy Savings (kWh)	1st QUARTER	2nd QUARTER	3rd QUARTER	4th QUARTER	1st YTD TOTAL
Home Performance with ENERGY STAR® Program	52,140	0	125,136	2,607	179,883
Low-Income New Homes	95,175	109,506	190,350	87,561	482,592
Low-Income Weatherization	2,400	2,400	19,200	0	24,000
Building Operator Certification	0	0	0	0	0
Commercial & Industrial Rebate Program	54,520	69,513	55,883	50,431	230,347
Program 8					
Program 9	440,107	1,543,713	731,643	483,796	3,199,259
Incremental Total Energy Savings (MWh)	644,342	1,725,132	1,122,212	624,395	4,116,081
Cumulative Total Energy Savings (MWh)	644,342	2,369,474	3,491,686	4,116,081	4,116,081

Union Electric Company d/b/a Ameren Missouri

Natural Gas Energy Efficiency Program (Program Year 2014) 12/31/2014

Cumulative CCF Savings

Residential	1Q14	2Q14	3Q14	4Q14
1) Programmable Thermostat (moderate setback)	171	4,503	5,985	8,493
2) Furnace - 92% to 93.9% Owner	162	891	1,377	1,620
2) Furnace - 92% to 93.9% Landlord	81	162	162	324
3) Furnace - 94% to 95.9% Owner	768	1,920	5,280	8,928
3) Furnace - 94% to 95.9% Landlord	96	672	1,440	1,824
4) Water Heater67 or greater	68	238	306	340
5) Boiler - 85% to 89% Owner	0	0	0	0
5) Boiler - 85% to 89% Landlord	0	0	0	0
6) Boiler - 90% or higher Owner	0	0	92	184
6) Boiler - 90% or higher Landlord	0	0	0	0
7) Ceiling Insulation	0	0	0	0
8) Wall Insulation	0	0	0	0
9) Hot Water Measure Kit	3,294	5,978	8,357	10,553
10) Building Shell Measures - Home Energy Audit Improvement	Ĺ			
Ceiling Insulation	5,635	21,560	33,075	48,510
Wall Insulation	0	363	1,089	2,299
Air Sealing	760	4,104	6,156	8,664
Duct Sealing	0	0	0	0
Hot Water Measure Kit	0	0	0	0
Residential Total	11,035	40,391	63,319	91,739
General Service				
1) Programmable Thermostat (assumes 40k sq ft conditioned floor space)	0	0	0	311
2) Steam Trap Replacement	0	0	0	0
3) Food Service Steamer - 5 pan	0	0	0	0
4) Food Service Steamer - 6 pan	0	0	0	0
5) Food Service Double Oven	0	0	0	0
6) Tank Storage Water Heater - Tier 1	0	0	0	0
7) Tankless Water Heater	0	0	0	0
8) Hot Water Measure Kit	0	0	0	0
9) Ceiling Insulation	0	0	0	0
10) Wall Insulation	0	0	0	0
11) Building Shell Measures - Commercial Energy Audit Improvement	0	0	0	0
Ceiling Insulation	0	0	0	0
Wall Insulation	0	0	0	0
Air Sealing	0	0	0	0
Hot Water Measure Kit	0	0	0	0
12) Pre-Rinse Spray Valve	0	0	0	2,244
13) Natural Gas Large Vat Fryer	0	0	0	0
General Service Total	0	0	0	2,555
Home Energy Analysis Total	40.007	24,327	35,401	44,745
Home Energy Analysis rotal	12,067 23,102	64,718	98.720	139,039

Program Incentives (Cumulative)

Residential	1Q14	2Q14	3Q14	4Q14
1) Programmable Thermostat (moderate setback)	\$75	\$1,270	\$1,785	\$2,923
2) Furnace - 92% to 93.9% Owner	\$ 300	\$1,350	\$1,800	\$2,250
2) Furnace - 92% to 93.9% Landlord	\$ 200	\$400	\$1,000	\$1,400
3) Furnace - 94% to 95.9% Owner	\$2,000	\$6,500	\$15,250	\$24,750
3) Furnace - 94% to 95.9% Landlord	\$300	\$900	\$3,300	\$4,500
4) Water Heater67 or greater	\$250	\$875	\$1,125	\$1,250

5) Boiler - 85% to 89% Owner	-	- \$	\$ -	\$ -
5) Boiler - 85% to 89% Landlord	\$ -	\$ -	\$ -	\$ -
6) Boiler - 90% or higher Owner	\$ -	\$ -	\$150	\$300
6) Boiler - 90% or higher Landlord	\$ -	\$ -	\$ -	\$ -
7) Ceiling Insulation	\$ -	\$ -	\$ -	\$ -
8) Wall Insulation	\$ -	\$ -	\$ -	\$ -
9) Hot Water Measure Kit	\$	\$	\$2,233	\$2,820
	880	1,597	42,200	42,020
10) Building Shell Measures - Home Energy Audit Improvement				
Ceiling Insulation	\$	\$	\$35,954	\$55,966
	6,650	24,715	400,000	,
Wall Insulation	\$ -	\$	\$5,030	\$8,391
		1,305		,
Air Sealing	\$	\$	\$9,302	\$13,072
	1,397	6,884		
Duct Sealing	\$ -	\$ -	\$ -	\$ -
Hot Water Measure Kit	\$ -	\$ -	\$ -	\$ -
Residential Total	\$	\$	\$	\$
	12,052	45,796	76,929	117,623
General Service	1Q14	2Q14	3Q14	4Q14
1) Programmable Thermostat (assumes 40k sq ft conditioned floor space)	\$ -	\$ -	\$ -	\$ 50
2) Steam Trap Replacement	\$ -	\$ -	\$ -	\$ -
3) Food Service Steamer - 5 pan	\$ -	\$ -	\$ -	\$ -
4) Food Service Steamer - 6 pan	\$ -	\$ -	\$ -	\$ -
5) Food Service Double Oven	\$ -	\$ -	\$ -	\$ -
6) Tank Storage Water Heater - Tier 1	\$ -	\$ -	\$ -	\$ -
7) Tankless Water Heater	\$ -	\$ -	\$ -	\$ -
8) Hot Water Measure Kit	\$ -	\$ -	\$ -	\$ -
9) Ceiling Insulation	\$ -	\$ -	\$ -	\$ -
10) Wall Insulation	\$ -	\$ -	\$ -	\$ -
11) Building Shell Measures - Commercial Energy Audit Improvement				
Ceiling Insulation	\$ -	\$ -	\$ -	\$ -
Wall Insulation	\$ -	\$ -	\$ -	\$ -
Air Sealing	\$ -	\$ -	\$ -	\$ -
Hot Water Measure Kit	\$ -	\$ -	\$ -	\$ -
12) Pre-Rinse Spray Valve	\$ -	\$ -	\$ -	\$ 286
13) Natural Gas Large Vat Fryer	\$ -	\$ -	\$ -	\$ -
General Service Total	\$ -	\$ -	\$ -	\$ 336
Home Energy Analysis Incentives	\$	\$	\$	\$
J. 7	38,191	76,639	114,984	137,428
	,	,	,	,
Combined Incentives	\$	\$	\$	\$
Combined intentives	50,243	122,435	191,913	\$ 255,387

Committed Incentives (Outstanding Reservations)

Residential	1Q14	2Q14	3Q14	4Q14
2) Furnace - 92% to 93.9% Owner	\$ 5,450	\$ 9,150	\$ 15,950	\$26,250
2) Furnace - 92% to 93.9% Landlord	\$ 1,900	\$ 3,200	\$ 5,000	\$7,000
3) Furnace - 94% to 95.9% Owner				
3) Furnace - 94% to 95.9% Landlord				
4) Water Heater67 or greater	\$ 875	\$ 1,625	\$ 2,500	\$3,875
5) Boiler - 85% to 89% Owner	\$ 300	\$ 450	\$ 600	\$750
5) Boiler - 85% to 89% Landlord	\$ 300	\$ 600	\$ 600	\$600
6) Boiler - 90% or higher Owner				

6) Boiler - 90% or higher Landlord			1	1
7) Ceiling Insulation				
8) Wall Insulation				
10) Building Shell Measures - Home Energy Audit Improvement				
Ceiling Insulation	\$ 30,950	\$ 50,085	\$ 68,446	\$85,634
Wall Insulation	\$ 7,200	\$ 12,295	\$ 16,570	\$24,409
Air Sealing	\$ 7,003	\$ 9,716	\$ 14,898	\$19,728
Duct Sealing	\$ 600	\$ 1,200	\$ 1,600	\$1,600
Residential Total	\$ 54,578	\$ 88,321	\$ 126,164	\$ 169,845
General Service				
2) Steam Trap Replacement				\$1,250
3) Food Service Steamer - 5 pan				
4) Food Service Steamer - 6 pan				
5) Food Service Double Oven				
6) Tank Storage Water Heater - Tier 1				
7) Tankless Water Heater				\$150
9) Ceiling Insulation				
10) Wall Insulation				
11) Building Shell Measures - Commercial Energy Audit Improvement				
Ceiling Insulation	\$ 500	\$ 500	\$500	\$1,000
Wall Insulation				
Air Sealing				
13) Natural Gas Large Vat Fryer				
General Service Total	\$ 500	\$ 500	\$ 500	\$ 2,400
Table			\$	
Total Committed	\$ 55,078	\$ 88,821	\$ 126,664	\$ 172,245

Program Costs (Cumulative)

Other Program Costs	1Q14	2Q14	3Q14	4Q14
EFI Admin Costs	\$	\$	6700	10093
	1,233	4,230		
Honeywell Admin Costs	\$	\$	\$58,161	\$78,120
	18,243	38,202		
Ma-keting	\$ -	\$ -	\$ -	
Evaluation	\$ -	\$ -	\$ -	
Lovv Income Weatherization	\$ -	\$ -	\$ 263,000	\$ 263,000
Total Program Expenditures	\$ 69,719	\$ 164,867	\$ 519,774	\$ 606,600

Laclede Customer Class	Total E.E. Measures Since Program Inception	Total Rebate Dollars Since Program Inception	Estimated MCF Savings
Residential	39,098	\$3.79 Million	312,246
Commercial/Ind	1,235	\$1.34 Million	212,105

MGE

Summary of Program Activity

Rebate	Summary
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Rebate Activity Based on Energy Federation, Inc. Invoice Date	Heating System Rebates	Energy Star Combination Furnace/Water Heater	Programmable Thermostat	Water Heater Rebates		bate Ilars	Estimated First Year MCF Impact
1Q15	286	0	78	53	\$ 78,2	200.00	4,437.60
2Q15	0	0	0	0	\$	_	0.0
3Q15	0	0	0	0	\$	_	0.0
4Q15	0	0	0	0	\$	_	0.0
FY2015	286	0	78	53	\$ 78,	200.00	4,437.6
1Q16	0	0	0	0	\$	_	0.0
2Q16	0	0	0	0	\$	_	0.0
3Q16	0	0	0	0	\$	-	0.0
4Q16	0	0	0	0	\$	-	0.0
FY2016	0	0	0	0	\$	-	0.0
1Q17	0	0	0	0	\$	-	0.0
2Q17	0	0	0	0	\$	-	0.0
3Q17	0	0	0	0	\$	-	0.0
4Q17	0	0	0	0	\$	-	0.0
FY2017	0	0	0	0	\$	-	0.0
Pehate Activity T	hrough 40 EV2	017 (10/1/2014 - 9/30/2	017)				
ACDUIC ACTIVITY II	286	0	78	53	\$ 79	200.00	4,437.6
	200	U		ds Invested	Ψ 10,	200.00	4,407.0

Funds Invested	Energy Federation Rebates Paid	Energy Federation Administration Paid	Residential Program Total Funds Invested
1Q15 2Q15 3Q15 4Q15	\$ 78,200.00	\$ 10,651.27	\$ 88,851.27
	\$ 78,200.00	\$ 10,651.27	\$ 88,851.27
1Q16 2Q16 3Q16 4Q16			
	\$ -	\$ -	\$ -
1Q17 2Q17 3Q17 4Q17		_	
	\$ -	\$ -	\$ -
	\$ 78,200.00	\$ 10,651.27	\$ 88,851.27

Liberty Utilities

Budget vs. Actual Sep13 - Aug14

Year 4

EE Program	<u>Budget</u>	Year 4 Actuals	Variance
Weatherization	\$ 105,000	\$ 105,000	\$ -
Rebates	65,000	77,097	(12,097)
Education	10,000	14,035	(4,035)
Building Shell	108,787	28,715	80,072
To	stals \$ 288,78	\$ 224,847	\$ 63,940

Liberty Utilities Energy Education Workshops 2014-2015

Final Report

The EarthWays Center of the Missouri Botanical Garden provided assistance again this year with Liberty Utilities efforts to promote and expand their Energy Education program. The overall goal of the Liberty Utility professional development workshops was to empower educators to create greener, healthier schools and incorporate the best practices of sustainability; particularly in the field of energy efficiency and conservation. These workshops focus on providing educators with the lessons and background knowledge on the sources of energy, forms of energy production, sustainability and energy efficiency. All lessons are inquiry/activity based.

This year, prior to the workshops, the staff at EarthWays Center updated the lessons to reflect current standards used by classroom teachers. All of the lessons and activities were given a grade level equivalency and correlated to the Show-Me Standards for Missouri and the Next Generation Science Standards. Additions were made to the lesson plan with the inclusion of essential questions, objectives, and suggested discussion questions. Several lessons were differentiated for different grade levels and language usage changed on student handouts to reflect different levels of reader.

Three workshops were held this summer, Cape Girardeau, Kirksville and Butler, MO. Total attendance at the workshops (not including presenters) was 42 educators; 18 at Cape Girardeau, 23 at Kirksville and one in Butler. The workshops in Kirksville and Cape Girardeau in particular saw dramatic gains in attendance this year with an increase of 260% (from a combined 16 attendees to 41). There were 7 teachers in attendance that had been at the same workshop last year. The Butler workshop had two registrants but only one in attendance. While attendance wasn't what we had hoped, based on lessons learned from last year, starting the workshop and building from there may be a positive move.

Educators in attendance were provided with a digital copy of all lessons and handouts, a hand boiler (energy toy), lunch, and a \$100 stipend to those educators who worked in an area serviced by Liberty Utilities. Each workshop started with lessons on energy sources and types of energy. Matt Huber of Liberty Utilities would give a short talk about natural gas, interesting facts about the gas company, how natural gas is delivered to homes and how a gas meter operates. After the Liberty presentation educators were given lessons on natural gas pipelines and coal from creation to usage. The afternoon was focused on sustainability and renewable energy with educators participating in STEM activities about solar and wind energy creation.

Evaluations from the attending educators was particularly high with many requests for more workshops and 13 requests to have the presenter come to their school to teach some of the lessons presented to their students (that the teacher may see it in action with students and have an "expert" on hand). The average (mean) of evaluations -range was 1 (low) to 4 (high) -was as follows:

	Ideas to use in class	Instructors knowledge	Comfortable using the
		and enthusiasm	info and lessons
Low	2	4	3
High	4	4	4
Mean	3.61	4	3.78
Standard Deviation	0.59	0	0.62

Among the more common answers for "What would you like to see more of in this workshop?" were more cross-curricular connections to science, a two day workshop, more hours, writing prompts for the activities, language arts connections (book suggestions), pictures and videos of student work on these activities, and more activities for upper grade levels. Further positive feedback came in answers to the question "What did you like most about this workshop?" The most common answers were the hands on activities, games and interactive lessons.

While attendance at the Butler workshop was not strong, connections have now been made in that area that could lead to better advertising of the workshop in local schools. If increases continue on this pace for Cape Girardeau and Kirksville two separate days may be required as EarthWays believes the effective maximum for a workshop of this type to be 25 participants.

The program is beginning to show strong growth and feedback from attendees is highly positive. The staff at the EarthWays Center is already looking to potential expansion of the program and how to accommodate teacher feedback for new materials and lessons. The benefits of direct engagement with the teachers in Liberty Utilities service area provides a strong connection with the community and is a key to the success of this education program. EarthWays Center would welcome the opportunity to continue to develop these relationships through the Liberty Energy Educators Program.

Submitted by:

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Submitted 27 July 2015

Attachments

Typical Agenda for workshop:

8:30 Introduction and Welcome

9:00 Energy Basics: Forms and Sources Review

9:45 Natural Gas and Liberty Utilities Guest Speaker

10:15 Energy to Electricity

10:40 Energy in Action: Student Projects

12:300 LUNCHES

1:00 Sustainability: Getting to the Big Picture

2:00 Solar Power 3:00 Exploring Wind

3:50Wrap Up

Attendees by Region:

Cape Girardeau: 18

Kirksville: 23 Butler: **1**

Presentation is available via Google Drive with any who would like to view the slides used.

Liberty Utilities

Energy Educators Workshop

2015 Evaluations Breakdown

	Ideas to use in class	Instructors knowledge	Comfortable using the
		and enthusiasm	info and lessons
Low	2	4	3
High	4	4	4
Mean	3.61	4	3.78
Standard Deviation	0.59	0	0.62

What did you like most about this workshop?

Grade level taught in parentheses.

- Hands on activities and information with real life examples (5)
- Information and hands on activities, classroom ideas, great instructor presentation (?)
- Hands on activities, knowledge of instructor (K-6 special Ed)
- Hands on activities, lesson plan alignment (K-6)
- Hands on activities, the information in general (K-6)
- Hands on activities to take back to the classroom (3-6)
- Hands on activities with short intro (7-12 science)
- Hands on activities I can use to engage students (7-8 science)
- "I loved raising my energy consciousness and learning new facts about a variety of energy sources. I loved the energy audit idea in particular. (2-8 gifted (
- Activities, graphics, presentation (6-9 Language, 9-12 Life Skills)
- The activities that can be used in the classroom {9-12}
- Games and lessons that can be used in classroom and easily modified. (4¹h)
- Hands on activities (Kindergarten)
- The activities were fun (2)
- Making wind mill, solar ovens (6)
- I loved the interaction and learned different ways to incorporate activities (5-6)
- Hands on activities (3)

What would you like to see more of in this workshop?

- More cross-curricular connections with science (5)
- Any other workshops like this(?)
- I enjoyed all of it, more games! (K-6 special ed)
- Maybe a 2-day workshop to gets lots of activities (K-6)
- 2 Day workshop and more activities (K-6)
- I was pleased with the workshop (3-6)
- More hours (7-12 science)
- More is better, more activities! (2-8 gifted)
- Looking forward to next year! (6-9 Language, 9-12 Life Skills)
- More activities for upper level classes (9-12)
- More lower-level activities (Kindergarten)
- Student examples/photos of doing this in the classroom (6)
- Student work or pictures of their interactions (5-6)
- More writing prompt activities (3)

Empire District Gas Company		Program Year 5	n Yea	r 5		Program Year 4	Year	4
	Ø	Quarterly Program Costs	ogran	n Costs	ğ	Quarterly Program Costs	ogram	Costs
Program Costs		Budget	<i>'</i>	Actual	ш	Budget	Α	Actual
Weatherization	↔	75,000	\$	20,992	\$	75,000	\$	18,693
Water Heating (tanked/tankless)	↔	29,925	↔	6,432	ઝ	29,925	s	1,600
Space Heating (furnace/tstat)	↔	54,338	↔	30,617	\$	54,338	↔	30,475
Star	s	26,513	8	2,133	s	26,513	s	,
Comm. & Industrial Large Volume	↔	42,000	↔	1,267	s	42,000	↔	
Building Operator Certification	↔	5,229	↔	•	s	5,229	↔	•
Apogee	ઝ	9,425	ઝ	2,000	8	9,425	S	-
Total	\$	242,430	\$	63,441	\$	242,430	\$	50,768
		Program Year 5	n Yeal	r 5 /inds		Program Year 4	Year	. 4 sp.dia
Energy Savings MCF	В	Budget	A	Actual	Buc	Budget	Actual	ual
Weatherization	1,310	0		491	1,310	0	•	197
Water Heating	555			31	555			46
Space Heating	2,113	က		1,328	2,113	က	1,5	1,596
nome Penomance with Energy Star	810			18	810			1
Comm. & Industrial Large Volume	3,774	4		341	3,774	4		
Building Operator Certification		ı		ı	ı			
Apogee		•						•
Total	8,562	32		2,209	8,562	25	1,8	1,838