

## Energy Efficiency Kits Program Impact and Process Evaluation

**PROGRAM YEAR 2017**

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**Prepared for:**

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## Executive Summary

Ameren Missouri engaged Cadmus to perform annual process and impact evaluations of the Energy Efficiency Kits program for a three-year period, from 2016 through 2018. This annual report covers the impact and process evaluation findings for Program Year 2017 (PY17), the period from March 1, 2017, through February 28, 2018—the second year of the three-year program cycle.

### *Program Description*

As in the previous year, the PY17 program provided energy efficiency kits through two separate delivery channels:

- **School-Based Delivery Channel.** Ameren Missouri offered this delivery channel for a second year. Participating teachers received classroom curriculum and energy-saving school kits (school kits) to distribute to their students. In PY17, the Energy Efficiency Kits program co-delivered the school-based delivery channel with natural gas provider, Spire, which serves Eastern and Western Missouri.
- **Multifamily Delivery Channel.** While Ameren Missouri offered this delivery channel in PY15 through the Efficient Products program, it moved to the Energy Efficiency Kits program as of PY16. This delivery channel provided energy-saving multifamily kits (multifamily kits) to property managers of eligible multifamily homes. To become eligible, properties had to have three or more rental units with electric water heaters. The property manager (or staff) installed multifamily kit items in each of the property's units.

School kits contained the following:

- One energy-efficient showerhead
- One energy-efficient kitchen faucet aerator
- One energy-efficient bathroom faucet aerator
- One furnace filter alarm
- Three feet of water heater pipe wrap
- Four LEDs

Multifamily kits contained the following:

- One energy-efficient showerhead
- One energy-efficient kitchen faucet aerator
- One energy-efficient bathroom faucet aerator
- One furnace filter alarm
- Six feet of water heater pipe wrap
- Six LEDs

For PY16–18, Ameren Missouri contracted with ICF International (ICF) to implement the program. ICF implemented the multifamily and school-based delivery channels, with support from National Energy Foundation (NEF; a nonprofit educational organization dedicated to the development and implementation of supplementary educational materials and programs) for delivery of the school-based delivery channel. Starting in PY17, ICF co-delivered the kits with Spire, a gas provider.

For the multifamily kit delivery channel, ICF developed marketing materials and collateral, delivered and tracked multifamily kit items, and managed enrollment. For the school-based delivery channel, NEF developed the school kit curriculum, built awareness of the program with eligible schools, delivered and tracked the school kits and program materials, enrolled teachers, and conducted day-to-day management. NEF wrote the curriculum materials for a sixth-grade level and confirmed their appropriateness with the Missouri Department of Education.

## *Key Impact Evaluation Findings*

This section describes Cadmus' key findings for the PY17 evaluation period.

### **Program Data**

The Cadmus team reviewed the tracking data as part of the impact evaluation. In PY17, the implementation team tracked program data using the Vision database, which was designed to make program data accessible to program administrators and evaluators in real time.

For the school-based delivery channel, the Vision database tracked shipments of school kits from the NEF implementer to teachers. In the tracking data, Ameren Missouri claimed savings for a subset of the hot water heating measures (15% of measures in co-branded kits and 17% of measures from Ameren Missouri-only kits), for which they anticipated electric hot water heating savings. To verify these school kits, the evaluation team compared the number of school kits tracked in the Vision database to NEF's shipment data, which included the number of school kits shipped to each school. Given this was a school delivery channel and student contact data were private, tracking data did not include account numbers or customer-level information. The team verified that the number of kits tracked in the Vision database was consistent with NEF's shipment data.

For the multifamily delivery channel, the Vision database tracked shipments of multifamily kits from Ameren Missouri to participating property managers. The team reviewed the shipment data against application data and did not adjust measure quantities for this delivery channel.

### **Program Data Adjustments**

Following review of the tracking data, the evaluation team used participant surveys to conduct additional verification of assumptions. The team surveyed all participating property managers receiving multifamily kits and families receiving school kits and providing contact information. The team estimated in service rates (ISR), electric hot water heating saturation, and proportion of Ameren Missouri customers from survey responses. The analysis used the information as adjustments in the gross savings calculations.

While evaluating the *ex ante* assumptions for each measure, the evaluation team noted that *ex ante* savings calculations included assumed adjustments for ISR, Ameren Missouri customer proportion, and electric saturation (although pipe wrap *ex ante* calculations did not include electric saturation, as this was accounted for in the amount of pipe wrap paid for by Ameren Missouri (15%) under the program). Accordingly, Cadmus took care to report comparable *ex post* savings estimates, except as noted. Additionally, while the tracking database claimed savings for only the proportion of the hot water measures assumed to be electric (for instance, the tracking database showed savings for 2,511 of the total 16,117 showerheads delivered), the evaluation team applied the evaluated adjustments, including electric hot water heating saturation, to the total number of delivered measures (16,117 measures, in the case of showerheads).

## Gross Impacts

Table 1 summarizes PY17 participation, *ex post* gross per-unit savings, realization and installation rates, and *ex post* total gross savings. Cadmus estimated per-unit gross realization rates for all Energy Efficiency Kit measures as the ratio of Ameren Missouri's *ex ante* savings from its 2017 Technical Resource Manual (TRM) export and the evaluated (*ex post*) savings.

The evaluation team found the following measures achieved the highest realization rates for the school kit:

- Furnace filter alarms (94%)
- LED bulbs (93%)
- Energy-efficient kitchen faucet aerators (89%)
- Energy-efficient bathroom faucet aerators (87%)

For school kits, the team attributed lower PY17 realization rates to lower installation rates (particularly for showerheads, furnace filter alarms, and water heater pipe wrap) and to adjustment factors such as in-service rates, customer coverage, and electric hot water heating saturation.

Energy-efficient showerheads and bathroom faucet aerators exhibited the highest realization rates for multifamily kits (127% and 112%, respectively). For showerheads, the difference in estimates resulted from higher-than-assumed efficiency improvements based on updated program data (difference in rated gallons per minute for the base showerhead and the new showerhead). Differences in the *ex ante* and *ex post* saving estimates for bathroom faucet aerators stemmed from PY17 survey results that indicated slightly fewer faucets used per home than assumed. For both delivery channels, hot water heater pipe wrap had the lowest realization rates (67% for school kits and 71% for multifamily kits), due to differences in calculations of *ex ante* savings inputs (R-value, temperature differences between the hot water and air temperature, and for consistency between hours of use and days per year).

**Table 1. PY17 Summary: Ex Post Program Gross Savings Accounting for Installation Rates**

Measure	PY17 Participation <sup>1</sup>	Per-Unit Ex Post Savings (kWh/yr)	Realization Rate	Percent Installed and Operating	Saturation	Ameren Missouri Customers	Total Ex Post Gross Savings (MWh/yr)
<b>School Kits</b>							
Energy-Efficient Showerhead	16,117	59.38	81%	57%	34%	90%	957
Energy-Efficient Kitchen Faucet Aerator	16,117	40.74	89%	53%	34%	90%	657
Energy-Efficient Bathroom Faucet Aerator	16,117	6.95	87%	56%	34%	90%	112
LEDs	64,468	27.76	93%	92%	100%	90%	1,790
Water Heater Pipe Wrap (feet) <sup>2</sup>	48,351	2.53	23%	66%	34%	90%	122
Furnace Filter Alarm	16,117	64.25	94%	45%	100%	90%	1,036
<b>Multifamily Kits</b>							
Energy-Efficient Showerhead	862	262.60	127%	100%	100%	100%	226
Energy-Efficient Kitchen Faucet Aerator	862	113.15	98%	100%	100%	100%	98
Energy-Efficient Bathroom Faucet Aerator	862	37.61	112%	100%	100%	100%	32
LEDs	5,172	33.54	90%	100%	100%	100%	173
Water Heater Pipe Wrap (feet)	876	12.35	71%	100%	100%	100%	11
Furnace Filter Alarm	862	177.38	91%	100%	100%	100%	153

<sup>1</sup> Verified measures.

<sup>2</sup> The Ameren Missouri TRM value for hot water heater pipe wrap did not adjust for electric hot water heating saturation, as this was accounted for in the amount of pipe wrap Ameren Missouri paid for under the program, 15% (Spire paid for the remaining 85%). Without electric hot water heating saturation adjustment, the fully adjusted *ex post* savings value for pipe wrap was 2.53 kWh/yr.

## Net Savings

The evaluation team used participant surveys to inform net-to-gross (NTG) calculations for both the school-based and multifamily delivery channels. As shown in Table 2, the school-based delivery channel had an overall, savings-weighted, NTG ratio (excluding nonparticipant spillover [NPSO]) of 91.8%, and the multifamily delivery channel had an overall, savings-weighted, NTG ratio (excluding NPSO) of 100.0%. The team accounted for NPSO separately as it has a different load shape and, therefore, different demand impacts than direct program savings. First year NPSO savings are shown below, as are 2023 NPSO savings which have been adjusted to account for measures with an estimated useful life (EUL) that does not extend through 2023.

**Table 2. PY17 Net Impact Results Summary**

Delivery Channel	Ex Post Gross Savings (MWh/yr)	Free Ridership	Participant Spillover	NTG (w/o NPSO)	Net Energy Savings (MWh/yr)	Net Demand Savings – First Year (kW/yr)	Net Demand Savings – Year 2023 (kW/yr)
School Kit	4,673	31.2%	23.0%	91.8%	4,289	870	859
Multifamily Kit	694	0.0%	0.0%	100.0%	694	130	129
Nonparticipant Spillover	–	–	–	–	22	17.3	1.3
<b>Total</b>	<b>5,367</b>	<b>27.2%</b>	<b>20.0%</b>	<b>92.8%</b>	<b>5,004</b>	<b>1,017</b>	<b>989</b>

As shown in Table 3, the PY17 program achieved 81% of its net energy savings target of 6,194 MWh, as specified in Ameren Missouri’s residential filing.<sup>1</sup> The table presents the coincidence factors used to calculate demand savings for this program.

**Table 3. PY17 Energy Efficiency Kits Savings Comparisons**

Metric	MPSC-Approved Target	Ex Ante Net Savings Reported	Ex Post Gross Savings Determined by EM&V <sup>1</sup>	Ex Post Net Savings Determined by EM&V <sup>2</sup>	Percent of Goal Achieved <sup>3</sup>
Energy (MWh)	6,214	6,032	5,367	5,004	81%
Demand – First Year (kW)	1,046	1,737	1,044	1,017	97%
Demand – Year 2023 (kW)	1,046	1,737	1,044	989	95%

<sup>1</sup>MWh calculated by multiplying verified program participation by Cadmus’ evaluated per-unit savings values; kW calculated by applying coincident factors provided in Appendix A.

<sup>2</sup>Calculated by multiplying the team’s evaluated gross savings and evaluated NTG ratio and adding the appropriate program-level allocation of NPSO savings.

<sup>3</sup>Compares MPSC Approved Target and Ex Post Net Savings Determined by EM&V.

## Code of State Regulations Impact Evaluation Requirements

According to the Missouri Code of State Regulations (CSR), demand-side programs functioning as part of a utility’s preferred resource plan become subject to ongoing process and impact evaluations that meet certain criteria. Specifically, the CSR requires that impact evaluations of a demand-side program satisfy the requirements listed in Table 4. The table also indicates data that the team used to satisfy these impact CSR evaluation requirements for the Energy Efficiency Kits program. Table 5, at the end of the Process Evaluation section, summarizes the process CSR requirements.

<sup>1</sup> Union Electric Company. d/b/a Ameren Missouri’s 2nd Filing to Implement Regulatory Changes in Furtherance of Energy File No. EO-2015-0055 Efficiency as Allowed by MEEIA. Appendix B. MEEIA 2016-2018 Summary.

**Table 4. Summary Responses to CSR Impact Evaluation Requirements**

CSR Requirement <sup>1</sup>	Method Used	Description of Program Method
<b>Approach: The evaluation must use one or both of the following comparisons to determine the program's impact:</b>		
Comparisons of pre-adoption and post-adoption loads of program participants, corrected for the effects of weather and other intertemporal differences	✓	The program compares the pre-adoption load, based on the assumed baseline technology with the post-adoption load, based on program technology.
Comparisons between loads for program participants and an appropriate control group over the same period		
<b>Data: The evaluation must use one or more of the following data types to assess program impact:</b>		
Monthly billing data		
Hourly load data		
Load research data		
End-use load metered data	✓	The evaluator used the following to determine Equivalent Full Load Hours: PY16 Heating and Cooling metering study (heating) and PY13 central air conditioner monitoring study (cooling).
Building and equipment simulation models	✓	The evaluator used PY16 building simulation modeling, adjusted for heating and cooling saturations, to determine the waste-heat factor of efficient lighting.
Survey responses	✓	The evaluator relied on the following: PY17 participating student family and property manager surveys to determine installation rates; the number of people per household; the number of kitchen faucets (for the school-based delivery channel); the number of bathroom faucets and showerheads per household; and electric water heating saturations.
<b>Audit and survey data on:</b>		
Equipment type/size efficiency		
Household or business characteristics	✓	The evaluator relied on PY17 participant/property manager surveys to determine: the number of household occupants; the number of kitchen faucets (for the school-based delivery channel) and bathroom faucets; and the number of showerheads.
Energy-related building characteristics	✓	For the school-based delivery channel, the evaluator relied on PY17 participant surveys to determine electric water heating saturations. For the multifamily kit delivery channel, the evaluator referred to the program requirements.

<sup>1</sup> State of Missouri. *Administrative Rules: Missouri Code of State Regulations*. Missouri 4 CSR 240-20.093, 4 CSR 240-20.094, 4 CSR 240-22.070(8). Revised January 2016. Available online: <http://www.sos.mo.gov/adrules/csr/csr.asp>

## Key Process Evaluation Findings

Cadmus conducted interviews with program stakeholders, reviewed program tracking data and marketing materials, and surveyed recipients of multifamily and school kits to inform the PY17 process evaluation. Key research findings follow.

## Benchmarking

Of five benchmarked school kit programs, Ameren Missouri's school-based delivery channel sent out the greatest number of school kits and reported savings that were slightly higher than for other programs.

In comparison to other programs which relied on direct-installation, the multifamily delivery channel used property manager installation of kit items in each unit and achieved higher installation rates and savings than other programs.

## Participant Satisfaction

Participating families expressed enthusiasm about the school-based delivery channel. Nearly all surveyed families strongly agreed that “[they] are satisfied with [their] child’s experience in the Ameren Missouri Energy Efficiency Kits School Program” (98%, n=282). Some recipients did not like the showerheads because the water pressure was too low after installation.

Participating property managers felt positively about their experiences with the multifamily delivery channel. Site-level property managers gave the lowest ratings to the furnace filter alarm out of all kit measures; two property managers reported that filter alarms did not go off, even though routine checks found the filters to be dirty.

## *CSR Process Evaluation Requirements*

As previously addressed, the Missouri CSR requires that demand-side programs serving as part of a utility's preferred resource plan are subject to ongoing process and impact evaluations that meet certain criteria. Process evaluations must address, at a minimum, the five questions listed in Table 5. The table provides a summary response for each specified CSR process requirement. Cadmus previously offered a summary of data used to meet with impact CSR requirements (Table 4).

**Table 5. Summary Responses to CSR Process Evaluation Requirements**

CSR Requirement Number <sup>1</sup>	CSR Requirement Description	Summary Response
1	What are the primary market imperfections common to the target market segment?	<p>The Energy Efficiency Kits Program target market segments did not change in PY17. The school-based kit delivery channel targeted households receiving energy from Ameren Missouri, who lack sufficient knowledge of the energy-saving benefits of the high-efficiency measures provided through the school kits. Secondly, using schools as a distribution point for energy efficiency kits presents the inefficiency of providing kits to households not using electricity from Ameren Missouri, either because they are not Ameren Missouri customers, or because they do not use electricity to heat their water. The multifamily kit delivery channel targeted savings in multifamily properties. These types of properties are more likely to involve residents who are separate from property owners, such that the party who does not pay the electricity bill (that would benefit from the energy savings) has no incentive to install high-efficiency household items.</p>
2	Is the target market segment appropriately defined, or should it be further subdivided or merged with other market segments?	<p>The school-based delivery channel and the multifamily delivery channel's target market segments are appropriately defined. The school-based delivery channel's target market segment consists of schools within Ameren Missouri's service territory. For the multifamily delivery channel, the target market segment consists of Ameren Missouri customers living in multifamily units that use electric water heating. While the electric water heating requirement is appropriate to the core program goals, expanding the target market by partnering with a gas provider to include gas hot water heating would enable to delivery channel to enroll more properties and generate savings for more non-hot water heating measures (i.e. LED bulbs and furnace filter alarms). The school-based delivery channel's educational component is designed to lessen the market imperfection of inadequate information or knowledge regarding energy-savings benefits from high-efficiency household items. In PY17, Ameren Missouri co-delivered the program with a natural gas provider to reduce the market imperfection of paying for gas saving measures of non-Ameren Missouri customers. This improved Ameren Missouri's ability to better target its customers.</p>



CSR Requirement Number <sup>1</sup>	CSR Requirement Description	Summary Response
3	Does the mix of end-use measures included in the program appropriately reflect the diversity of end-use energy service needs and existing end-use technologies within the target market segment?	<p>Kit programs focus on low cost measures that can easily be installed by non-energy professionals. The two kit delivery channels appropriately identified a diversity of low cost measures. Cadmus compared the school-based kit delivery channel and the multifamily kit delivery channel to similar utility programs to establish whether the kit contents represented standard practice or if other measures could be considered. For the multifamily delivery channel, all four benchmarked programs offered CFL light bulbs, showerheads, and kitchen and bathroom aerators to multifamily units. Compared to other programs, Ameren Missouri’s multifamily kit delivery channel contained most of the common measures provided by utilities, along with measures typically not offered by other similar programs (e.g., LED light bulbs, pipe wrap). The Ameren Missouri school kits included a range of lightweight measures that students could bring home and easily install. All programs included in the benchmarking offered showerheads, aerators, and LED or CFL light bulbs to students and their families. Compared to five other school kit programs, Ameren Missouri’s school kits contained all of the most common measures (e.g., light bulbs, showerheads, aerators, a filter alarm), except for an LED night light, which five other benchmarked programs offered. Results from the PY17 multifamily kits delivery channel participant survey suggest that furnace filter alarms may not be working in a way to meet the needs of property managers.</p>
4	Are the communication channels and delivery mechanisms appropriate for the target market segment?	<p>For school kits, communication flowed to and from Ameren Missouri, the implementers (ICF and NEF), school administrators and teachers, and students and families. Communication between these groups was clear and appropriate for the delivery channel. For the multifamily kits, communication flowed to and from Ameren Missouri, the implementer (ICF), the property managers, and their tenants. According to Cadmus interviews of stakeholders, the communication channels and delivery mechanisms for the multifamily delivery channel were appropriate, but there is an opportunity to better communicate available tenant informational materials.</p>

CSR Requirement Number <sup>1</sup>	CSR Requirement Description	Summary Response
5	What can be done to more effectively overcome the identified market imperfections and to increase the rate of customer acceptance and implementation of each end-use measure included in the program?	For the school delivery channel, the evaluation analysis found that the vast majority of respondents to the school kits participant survey found the instructions provided with the kit to be useful or very useful. Installation rates were in the range of benchmarked peer programs, although it may be possible to mitigate showerhead dissatisfaction through stronger emphasis of measure benefits. Adding the gas partnership to the school kits delivery channel effectively reduced the inefficiency of providing kits to households not using electricity from Ameren Missouri to heat their water. For the multifamily delivery channel, the delivery channel reduced the problem of incentivizing property managers to install energy efficient measures by providing free measures. In PY17 the program achieved 100% installation for distributed measures distributed to property managers for multifamily properties.

<sup>1</sup> State of Missouri. *Administrative Rules: Missouri Code of State Regulations*. Missouri 4 CSR 240-20.093, 4 CSR 240-20.094, 4 CSR 240-22.070(8). Revised January 2016. Available online: <http://www.sos.mo.gov/adrules/csr/csr.asp>

## Key Conclusions and Recommendations

In PY17, the Energy Efficiency Kits program successfully partnered with a gas provider to co-deliver the school-based delivery channel and increased participation in the multifamily delivery channel. Cadmus offers the following conclusions and recommendations for improving the program.

### Conclusion 1. School kits’ showerhead performance may have affected installation rates.

The evaluation team attributed the lower installation rate for showerheads in PY17 to slightly higher removals. PY17 school kit participants were less satisfied with showerheads than in the prior program year, and survey respondents more frequently cited low water pressure as the source for their dissatisfaction. Installation rates also declined somewhat for water heater pipe wrap and furnace filter alarms, but there no program changes or evaluation results explained the changes. One possible theory is that some PY17 participating households may have already received kits through siblings participating in PY16.

### Recommendation 1a. Evaluate school kit showerhead performance and increase education on measure benefits.

Increase the curriculum’s emphasis on specific benefits from energy-efficient showerheads, or provide tips for managing showers with lower water pressures to reduce resistance to perceived performance issues. Alternatively, explore different energy efficient showerhead models that could provide higher water pressures.

### Recommendation 1b. Modify PY18 Home Energy Worksheets to gauge repeat participation.

To monitor potential repeat participation, the team suggests adding a question to the PY18 Home Energy Worksheet to ask participating families about participation in prior years.

**Conclusion 2. Hot water heater pipe wrap showed low savings relative to *ex ante* estimates for both delivery channels.**

Cadmus attributes this observation to inputs in the *ex ante* savings calculations inputs.

**Recommendation 2. Review *ex ante* calculations for hot water heater pipe wrap.**

Update values used for pipe diameter, added diameter of the insulation, R-value, temperature difference between hot water and air temperatures consistent with evaluation findings. Modify inputs to achieve consistency between hours of use and days per year.

**Conclusion 3. Additional opportunities exist to optimize the school kits delivery channel.**

While stakeholders agreed that the school kits delivery channel continued to perform well, they also offered suggestions for improving communication, increasing the level of Home Energy Worksheet (HEW) submissions, and further extending the gas partnership.

**Recommendation 3a. Reassess efforts to communicate with teachers, particularly through developing online resources.**

NEF implementers felt that program delivery could benefit from further refining the materials to communicate details to teachers more efficiently. NEF also supported investing in online resources to use a more visual format and to streamline information dissemination and upload teacher evaluations (currently only offered on paper).

**Recommendation 3b. Extend gas co-delivery partnerships.**

With the success of the Ameren Missouri-Spire co-branding effort, Ameren Missouri program staff expressed interest in adding an additional partnership. As Ameren Missouri was the second most common gas provider among school kit survey respondents, this could take the form of integrating the school kits delivery channel with the Ameren Missouri gas portfolio.

**Conclusion 4. Electric hot water heating requirements limited participation in the multifamily delivery channel.**

According to the implementer, the program requirement for multifamily participants to have electric hot water heating requirement limited the channel's enrollment.

**Recommendation 4. Establish a gas company partnership to co-deliver multifamily kits or have a kit version with only light bulbs.**

Partner with a gas utility to broaden the pool of eligible multifamily properties. The residential lighting program evaluation found that renters were less likely to have tried LEDs than homeowners. Expanding the multifamily kits to more properties will increase LED saturation for renters.

**Conclusion 5. Multifamily furnace filter alarms may not operate as expected.**

Of six measures in the multifamily kits, property managers expressed the lowest satisfaction with furnace filter alarms, reporting that filter alarms did not go off, even though dirty filters were found during routine checks.

**Recommendation 5. Evaluate furnace filter alarm performance.**

Follow up with the implementer to investigate whether furnace filters were correctly installed, malfunctioned, or functioned but were not recognized. In the context of managed properties with routine filter checks, consider whether furnace filter alarms serve a redundant function.

**Conclusion 6. Multifamily property managers were not aware of available informational materials for communicating about the program with their tenants.**

Although program materials for the multifamily delivery channel included door hangers and pre- and post-installation letters to communicate program details to tenants, none of the property managers recalled receiving the informational material and reported drafting their own letters to tenants. As a suggestion for improving the program, one property manager asked for materials to explain the program to tenants.

**Recommendation 6. Promote available informational materials for property managers to use.**

Consider how to provide the materials so that property managers are more likely to utilize them.

## *PY16 Recommendation Tracking*

During the PY16 evaluation, the evaluation team provided recommendations for improving the delivery of the Energy Efficiency Kits Program, and these recommendations were taken under consideration for PY17’s program implementation. Table 6 summarizes the status of each recommendation.

**Table 6. PY16 Recommendation Tracking**

PY16 Recommendations	Recommendation Status	Ameren Missouri Explanation
Encourage teachers to integrate completion of the HEW into their curriculum. Providing examples of how other teachers have successfully encouraged completion of the HEW may be helpful to other teachers.	Completed	The teacher's folder includes "Rewarding Results," a sheet that encourages the teacher to give children a plastic wrist band as a reward for turning in completed HEW surveys. The folder also suggests potentially giving students a completion grade or extra credit, and the folder discusses the classroom's potential to receive a \$50 gift card with 80% survey participation.
Include clearer instructions on how to install showerheads, furnace filter alarms, and pipe insulation wrap. One parent requested a video walkthrough of how to install the items that they could watch prior to installing the measures.	Completed	A measure "Installation Instructions" sheet is included in each school kit. It lists each measure and specifically instructs how to install the measures. "Installation Videos" are located at <a href="http://AmerenMissouri.com/education">AmerenMissouri.com/education</a> , providing video instructions on installing the measures.

PY16 Recommendations	Recommendation Status	Ameren Missouri Explanation
Consider options for allowing teachers to choose between fall or spring participation. In PY17, consider fall and spring kit shipments and the opportunity for schools to participate more than once.	Ongoing	Feedback from teachers suggests that spring participation becomes challenging due to testing schedules.
Allow schools to return unused kit items, and publicize this option to them. Track the number of items and kits returned per school. Extra kits could effectively be redistributed later in fall or spring. Potentially make it easy for participating families and schools to return unused items by providing a box with a return shipping label for each school that could be kept at a central location.	Ongoing	Measure installations continue beyond the due date for teacher data collection. The program will explore the role of continued education and encouragement with teachers, regarding measure installation rates among students.
Consider partnering with a gas or water utility to distribute school kit costs. Partnering with another utility would help mitigate costs of school kits, which are inevitably distributed to non-Ameren Missouri customers.	Completed	Ameren Missouri partnered with Spire, a local gas company, starting late July 2017.
Ensure all marketing material match Ameren Missouri branding.	Completed	Confirmed that marketing materials match Ameren Missouri branding.

## Introduction

Ameren Missouri engaged Cadmus to perform annual process and impact evaluations of the Energy Efficiency Kits program for a three-year period, from 2016 through 2018. This annual report covers the impact and process evaluation findings for Program Year 2017 (PY17), the period from March 1, 2017, through February 28, 2018—the second year of the three-year program cycle.

### Program Description

In PY17, the program provided energy efficiency kits through two separate delivery channels:

- School-based delivery channel.** Implemented for the second year in PY17, this delivery channel provided participating teachers with classroom curriculum and energy-saving school kits (school kits) to distribute to their students. Each school kit contained: one energy-efficient showerhead; one energy-efficient kitchen faucet aerator; one energy-efficient bathroom faucet aerator; one furnace filter alarm; three feet of water heater pipe wrap; and four LEDs. Starting in PY17, the program was co-delivered with a gas provider, Spire.
- Multifamily delivery channel.** The Efficient Products program offered this delivery channel before introduction of the Energy Efficiency Kits program in PY15, implementing it for the second year under the Energy Efficiency Kits program in PY17. The channel provided energy-saving kits (multifamily kits) to property managers of eligible multifamily homes. To qualify, properties had to have three or more rental units with electric water heaters. Property managers (or staff) installed multifamily kit items in each property’s units. Each multifamily kit contained the following: one energy-efficient showerhead; one energy-efficient kitchen faucet aerator; one energy-efficient bathroom faucet aerator; one furnace filter alarm; six feet of water heater pipe wrap; and six LEDs. This provided two more LEDs than included in the PY16 kit. The contents were not fixed; two properties omitted the pipe wrap measure.

As shown in Table 7, kit items differed by delivery channel

**Table 7. PY17 Energy Kit Contents**

Measure	School Kit Quantity	Multifamily Kit Quantity
Energy-Efficient Showerhead	1	1
Energy-Efficient Kitchen Faucet Aerator	1	1
Energy-Efficient Bathroom Faucet Aerator	1	1
LEDs	4 bulbs	6 bulbs
Water Heater Pipe Wrap*	3 feet	6 feet
Furnace Filter Alarm	1	1

\*Each school kit contained 3 feet of pipe wrap, and each multifamily kit contained 6 feet.

For PY16–PY18, Ameren Missouri contracted with ICF International (ICF) to implement the program. ICF implemented both the multifamily and school-based delivery channels, with support from the National Energy Foundation (NEF) for delivery of the school-based delivery channel. NEF is a nonprofit

educational organization that promotes energy literacy and provides energy efficiency curriculum development and materials distribution to teachers. For the multifamily kit delivery channel, ICF created property manager marketing material and collateral for tenants; delivered and tracked multifamily kit items and program materials; and managed property manager eligibility and enrollment. For the school-based delivery channel, NEF developed the school kit curriculum; built program awareness through eligible schools; delivered and tracked school kits and program materials; enrolled teachers; and conducted day-to-day management. NEF wrote the curriculum materials at a sixth-grade level and confirmed their appropriateness with the Missouri Department of Education. When the program became jointly delivered in PY17, Spire worked with implementers alongside Ameren Missouri. NEF generated modified kit materials to incorporate Spire branding to produce one Ameren Missouri-only kit and a co-branded Spire-Ameren Missouri kit and targeted schools to receive the kit type most appropriate for their location based on utility territory.

## Program Activity

In PY17, the Energy Efficiency Kits program delivered a total of 16,117 school kits and 862 multifamily kits (to three properties), distributing a total of 186,783 energy efficiency products to Ameren Missouri participants, as shown in Table 8. To manage the school kits partnership with Spire, in the tracking data, Ameren Missouri reported a subset of the hot water heating measures which it anticipated would provide electric hot water heating savings, resulting in a smaller number of hot water heating measures reported than delivered.

**Table 8. PY17 Energy Efficiency Kits Program Activity**

Measure	PY17 Total Participation	PY17 Reported
<b>School Kits<sup>1</sup></b>		
Energy-Efficient Showerhead	16,117	2,511
Energy-Efficient Kitchen Faucet Aerator	16,117	2,511
Energy-Efficient Bathroom Faucet Aerator	16,117	2,511
LEDs	64,468	64,468
Water Heater Pipe Wrap (ft)	48,351	7,533
Furnace Filter Alarm	16,117	16,117
<b>Subtotal</b>	<b>177,287</b>	<b>95,651</b>
<b>Multifamily Kits</b>		
Energy-Efficient Showerhead	862	862
Energy-Efficient Kitchen Faucet Aerator	862	862
Energy-Efficient Bathroom Faucet Aerator	862	862
LEDs	5,172	5,172
Water Heater Pipe Wrap (ft)	876	876
Furnace Filter Alarm	862	862
<b>Subtotal</b>	<b>9,496</b>	<b>9,496</b>
<b>Total</b>	<b>186,783</b>	<b>105,147</b>

<sup>1</sup>For the school kits delivery channel, which was co-delivered with a local gas company, Ameren Missouri reported a subset of the total hot water heating measures that they delivered, which it anticipated would provide electric hot water heater savings. As a result, the reported number of hot water heating measures is smaller than the quantity of measures delivered.

## Evaluation Methodology

In evaluating Ameren Missouri’s Energy Efficiency Kits program, Cadmus identified the following objectives for PY17.

### Impact Evaluation Priorities

- Verify program tracking data
- Verify the number of installations to calculate gross energy and demand impacts
- Estimate net-to-gross (NTG) estimates, including spillover
- Assess coincident peak net demand savings using Ameren Missouri’s load shapes and estimation method

### Process Evaluation Priorities

- Assess customers’ satisfaction levels and participation motivations
- Research successful marketing strategies used to target multifamily properties and schools
- Assess program design and implementation, and identify opportunities for improvements in customer satisfaction and marketing
- Track changes in key progress indicators, including awareness changes
- Assess how well the educational information and energy-savings opportunities were understood

Table 9 lists evaluation activities and briefly explains the purpose of each. Descriptions of each activity follow the table.

**Table 9. PY17 Process and Impact Evaluation Activities and Rationale**

Evaluation Activity	Process	Impact	Rationale
Data Tracking Review		✓	Cadmus reviewed program tracking data recorded in the Vision database to determine the data’s completeness and to identify any variables necessary for impact calculations.
Engineering Analysis		✓	Cadmus estimated measure-specific savings using a set of algorithms and inputs.
Estimate NTG		✓	Cadmus estimated NTG to determine the portion of gross energy savings influenced by and attributable to the Energy Efficiency Kits program, free of other influences.
Stakeholder Interviews	✓		Cadmus interviewed program managers and implementers to understand their perspectives on program effectiveness.
School Administration Interviews	N/A	N/A	Cadmus interviewed school administrators, including teachers, in PY16, but not in PY17.
Property Manager Surveys	✓	✓	For the multifamily kit delivery channel, Cadmus interviewed corporate and site-level property managers to gather information to inform the NTG assessment, installation rates and program processes.



Evaluation Activity	Process	Impact	Rationale
Student Family Participant Surveys	✓	✓	For the school-based delivery channel, Cadmus surveyed student family participants that received school kits to gather information to inform the NTG assessment, installation rates and program processes.
Nonparticipant Spillover (NPSO)		✓	Cadmus estimated NPSO using a cross-cutting general population survey.
Marketing Review	✓		Cadmus reviewed Ameren Missouri’s Energy Efficiency Kits program marketing materials to understand program and outreach processes.
Benchmarking	✓	✓	Cadmus benchmarked Ameren Missouri’s Energy Efficiency Kits Program against similar programs to assess program design and implementation, and to identify opportunities for program delivery improvements.
Track Key Progress Indicators	✓	✓	Cadmus tracked key progress indicators for the second program year.
Cost-Effectiveness Review		✓	Ameren Missouri determined the Energy Efficiency Kits program’s cost-effectiveness.

## Data Tracking Review

Cadmus reviewed the program tracking data, recorded in the Vision database, to determine completeness and to identify variables necessary for impact calculations. The evaluation team received final school-based delivery channel and multifamily delivery channel Vision data in March 2018.

## Engineering Analysis

To estimate per-unit gross savings for each Energy Efficiency Kit program measure, Cadmus used engineering algorithms, assumptions, and all available Ameren Missouri- and participant-specific inputs. This report’s Gross Impact Evaluation Results section presents each algorithm and input assumption.

## Stakeholder Interviews

In January 2018, Cadmus interviewed program stakeholders to gather information on program design and planned changes; identify challenges encountered by program staff or implementers; and determine appropriate solutions.

As shown in Table 10, the team spoke with seven Ameren Missouri program stakeholders, including three program implementers; Appendix E provides the stakeholder interview guide.

**Table 10. PY17 Completed Stakeholder Interviews**

Stakeholder Group	Interviews Conducted
Ameren Missouri Program Management	3
ICF International Management	1
National Energy Foundation Management	3
<b>Total</b>	<b>7</b>

Throughout PY17, the evaluation team regularly spoke with Ameren Missouri program staff to discuss program operations and to coordinate evaluation activities.

## Participant Surveys

In PY17, Cadmus conducted an online survey of participating families who received the school kit (shown in Appendix F). The survey covered topics required for the impact and process evaluations, including measure verification, free ridership, spillover, participant awareness and decision-making, and satisfaction.

The evaluation team fielded the survey in late February to early March 2018. As ICF included an HEW in the school kits that requested the contact information, the team timed the survey for 16 weeks after students received school kits. The survey asked participants how many school kit items they installed, their satisfaction with the program, and questions about the participant’s home, including the number of occupants. To avoid duplicating efforts, the online survey did not ask for information ICF already gathered on HEWs.

**Table 11. Participant Survey Summary**

Target Audience	Survey Method	Field Dates	Population	Completed Surveys
School Kit Participants	Online	February–March 2018	2,844*	207
Multifamily Property Managers	Phone	January 2018	4	4

\*Cadmus surveyed all HEW respondents with a valid email address.

The team’s review of the customer data subset for student family school kits survey found a small number of households received more than one kit (n=85), though the team did not adjust for these kits. As the team had to procure email addresses to deliver the survey, the evaluation offered a drawing for three \$100 prizes for participants who provided their email address on the HEW returned by each school. Out of 7,863 HEWs returned, 2,844 provided an email address (shown in Table 11). Following distribution of the email survey invitation, 468 emails bounced, for an adjusted population of 2,376. About 298 respondents started the survey and, after taking into account incomplete responses, it received 207 completed responses for a response rate of 12.5%, on par with PY16.

The team also surveyed participating property managers, including one corporate-level property manager and three site-level property managers, who answered survey questions appropriate to their role. Administered by phone, the survey covered impact and the process evaluation topics, including measure verification, free ridership, spillover, participant awareness and decision-making, and satisfaction.

Fielded in January 2018, the survey asked property managers how many kit items they installed; their satisfaction with the program; and questions about the properties, including the number of occupants. The evaluation offered four \$50 prizes for completing the survey.

## Nonparticipant Surveys

In PY17 Cadmus conducted 2,373 online and 58 phone surveys with Ameren Missouri customers who did not participate in any of Ameren Missouri's energy efficiency programs. Cadmus conducted the surveys to calculate nonparticipant spillover (NPSO). The evaluation team drew a random sample of 62,500 Ameren Missouri customers and fielded the survey until we reached our quota of 2,244 nonparticipant customers. The team asked respondents if they had adopted energy efficiency measures and about the influence of Ameren Missouri's efficiency program marketing campaign on their decision to adopt the measures.

## Marketing Review

In PY17, Cadmus reviewed updates to marketing strategies occurring since the PY16 strategy assessment, along with marketing materials to support the process evaluation. As in PY16, program marketing and outreach differed between school-based and multifamily delivery channels.

For the school-based delivery channel, NEF shifted efforts away from principals and toward teachers: NEF sent emails to teachers about the program, followed by a letter.

For the multifamily delivery channel, ICF continued to market this to multifamily property owners, in tandem with Ameren Missouri's Low-Income program by building a list of contacts through hosting a booth at an apartment association conference to build contacts, using shared contact lists flagged for market rate units with electric water heating, and marketing to this group with seasonal electronic newsletters.

## Benchmarking

Cadmus updated the PY16 benchmarking analysis comparing Ameren Missouri's Energy Efficiency Kits Program with four multifamily kit programs and five school kit programs. The team based its analysis on secondary research using its benchmarking database and publicly available information to identify programs with the most recent evaluations available that contained information regarding metrics and topics planned for benchmarking. In PY17, we extended the benchmarking analysis for the multifamily channel to include installation rates and savings.

For both delivery channels, benchmarking research compared the following:

- Kit contents
- Measure installation rates
- Program participation
- *Ex post* per-kit savings (kWh)
- *Ex post* per-kit savings (kW)

## *Key Progress Indicators*

Cadmus tracks the following key progress indicators for the Energy Efficiency Kits program: program year electric savings, the number of energy efficiency kit recipients, changes to energy efficiency kit contents, and recipients' satisfaction with energy efficiency kits and Ameren Missouri. In the PY17 evaluation, the team compared these key progress indicators to new results.

## *Cost-Effectiveness*

Using final PY17 Energy Efficiency Kits program participation and implementation data, as well as the *ex post* gross and net savings estimates presented in this report, Ameren Missouri determined the program's cost-effectiveness using DSMore (a financial analysis tool designed to evaluate the costs, benefits, and risks of demand-side management [DSM] programs and services) and Cadmus reviewed the results. As shown in the Cost-Effectiveness Results section, Ameren Missouri assessed cost-effectiveness using all five of the standard perspectives produced by DSMore:

- Total Resource Cost (TRC)
- Utility Cost Test (UCT)
- Societal Cost Test (SCT)
- Participant Cost Test (PART)
- Ratepayer Impact Test (RIM)

## Process Evaluation Findings

This section presents Cadmus' process evaluation findings, organized into five sections:

1. Program design
2. Program delivery
3. Marketing and outreach
4. Teacher interviews
5. Student family survey results

Because program delivery did not change significantly, this evaluation does not report detailed process evaluation results, unless the team identified a significant area of difference or concern for school kits. In PY17, the evaluation added a property manager survey, the results of which this report provides. School Kit Survey Responses provides the school kit participant survey results.

### *Program Design*

The Energy Efficiency Kits program's design seeks to achieve energy savings through promotion of energy efficiency awareness and installation of household energy-saving products, supplied through two distinct delivery channels: school-based and multifamily.

The school-based delivery channel seeks to achieve long-term energy savings by increasing awareness of energy efficiency among youth within Ameren Missouri's service territory. To do so, the program distributes energy efficiency curriculum and kits. This delivery channel centers on the concept that educating young people about the benefits of saving energy results in long-term behaviors that reduce consumption. Ameren Missouri's primarily engenders these subtle yet significant behavioral changes using a specific curriculum, correlated to Missouri state standards. Installing and monitoring new energy efficiency kit items helps to reinforce the curriculum.

Participating sixth-grade teachers taught the energy efficiency curriculum and distributed kits to their students. At home, students—with their families' help—installed the kit measures. Following kit measure installation, students and their families answered questions on a HEW, either through a form that they returned to their teachers or online at [AmerenMissouri.com/education](http://AmerenMissouri.com/education).

If a family completed the form online, they received a confirmation code to put on the paper forms, and then were asked to return the form to their teachers. To encourage worksheet completion, teachers sending in at least 80% of their classroom's HEW data received a \$50 gift card, on the program's behalf. For completing the form, students received a Think! Talk! Take Action! wristband.

The multifamily delivery channel sought to achieve long-term energy savings by increasing multifamily property managers' awareness of low-cost energy efficiency items. Energy-saving items were distributed to market rate multifamily properties and directly installed by the properties' facility managers. The program distributed one kit's worth of items for each eligible market rate unit. Eligible participants

included Ameren Missouri electric account holders that own and manage non-low-income, multifamily properties with three or more rental units using electric water heaters. This delivery channel was originally offered and evaluated through the Efficient Products Program.

Each kit supplied every participating student, teacher, and eligible multifamily unit with the program measures shown in Table 12.

**Table 12. PY17 Energy Efficiency Kit Contents**

Measure	School Kit Quantity	Multifamily Kit Quantity
Energy-Efficient Showerhead	1	1
Energy-Efficient Kitchen Faucet Aerator	1	1
Energy-Efficient Bathroom Faucet Aerator	1	1
LEDs	4 bulbs	6 bulbs
Water Heater Pipe Wrap	3 feet	6 feet
Furnace Filter Alarm	1	1

As shown in Table 13, the kits also included supplemental material, which varied by delivery channel.

**Table 13. PY17 Energy Kit Supplemental Materials by Delivery Channel**

School Kit	Multifamily Kit
Teacher materials: <ul style="list-style-type: none"> <li>• Teacher Guide</li> <li>• DVD</li> <li>• Posters</li> <li>• Program Evaluation</li> <li>• Rewarding Results flier</li> <li>• Interactive website</li> </ul> Student materials: <ul style="list-style-type: none"> <li>• Shower timer</li> <li>• Student Guide</li> <li>• Parent letter</li> <li>• "Turn it Off" stickers</li> <li>• Flow test bag</li> <li>• HEW</li> <li>• <i>Think! Talk! Take Action</i> wristbands</li> </ul>	Door hanger Pre- and post-installation letters

## Program Delivery

This section discusses responses that program staff and implementers supplied during Cadmus' interviews, which primarily focused on roles and responsibilities, program implementation, program changes, delivery successes and program achievements, program implementation challenges, and potential changes for PY18.

## Roles and Responsibilities

Ameren Missouri program staff provided overall strategic direction and program management, and oversaw evaluation activities. In PY17, Ameren Missouri moved to having separate program managers for the two delivery channels. This supported integration of the market rate multifamily delivery channel management with that of the Community Savers program, which is Ameren Missouri’s low income multifamily property incentive program. Marketing the market rate and income-eligible delivery channels together allowed properties not qualified for the low-income program to become leads for the market rate program. ICF tracked program data and regular program reporting to Ameren Missouri staff.

As in PY16, ICF implemented the multifamily and school-based delivery channels in PY17, with NEF’s support for delivering the school-based delivery channel. For the multifamily kit delivery channel, ICF accomplished the following:

- Created the property manager marketing material and collateral for tenants
- Delivered and tracked multifamily kit items and program materials
- Managed property manager eligibility and enrollment

For the school-based delivery channel, NEF developed the school kit curriculum, built eligible schools’ awareness of the program, and delivered and tracked school kits and program materials, teacher enrollment, and day-to-day management. NEF wrote the curriculum materials for a sixth-grade level and confirmed their appropriateness with the Missouri Department of Education.

## Program Implementation

For PY17, Ameren Missouri program staff reported the same kit distribution goal as in PY16: 16,000 school kits. NEF attained the goal, distributing 16,117 school kits in PY17. Nearly all school kits were distributed in October 2017. The multifamily delivery channel sought to distribute 3,600 multifamily kits (a planned reduction from 10,000 kits in PY16). ICF distributed 862 multifamily kits to managers of three participating properties in PY17, falling short of their goal, but exceeding the number of kits distributed in PY16. According to program data, one of the three properties received the pipe wrap measure. ICF received applications in August 2017.

### *School-Based Delivery Channel Implementation*

Not only did the school-based delivery channel surpass its participation goals, but, by all accounts, the program continued to perform well. NEF implementer staff reported that the program filled quickly and had a high proportion of return teachers: of teachers who participated in PY16, 49% participated again the PY17 program, even with teacher turnover and the addition of teachers in schools in Spire territory. Further, the Missouri Department of Education recognized the program by applying for a federal award, the Green Ribbon Schools Award.

Implementers identified and Ameren Missouri approved which schools could participate in the school-based delivery channel based on school location, Ameren Missouri and Spire service territories, and information from PY16 HEW data where available. The Cadmus survey found 90% of surveyed

participants were Ameren Missouri customers (n=296)—an amount slightly more than in PY16. Overall, 36% of survey respondents and 34% of respondents who were Ameren Missouri customers had electric water heating (n=206), slightly fewer than in PY16. According to survey results, Spire provided gas to 55% of households who received school kits in PY17 and Ameren Missouri was the second most common gas provider.

As in the prior year, teachers registered online for how many kits they would need, based on numbers of students in their class. After verifying that the teacher was from an eligible school, NEF confirmed the number of school kits with the teacher prior to ordering kit shipment delivery directly to the school. As NEF tracked kits at the teacher-level (rather than by student) to preserve student privacy, more than one kit could go to one home if teachers had extras they distributed. About 3% of HEW respondents with emails returned worksheets for more than one kit.

### *Multifamily Delivery Channel Implementation*

For the multifamily kit delivery channel, PY17 participation increased relative to PY16, but still proved insufficient to meet reduced program goals. The program continued to market this channel to multifamily property owners in tandem with the Low-Income program as an efficient method to reach out to program managers, seeking to provide a single message (i.e., programs were available for their properties) and to provide a single point of contact with Ameren Missouri.

Recruitment continued as a key effort for this delivery channel. Joint market rate/low-income multifamily marketing efforts included a new brochure, describing both programs. ICF related that, in PY17, Apartment Association events offered the most successful means to connect with potential participants. The program hosted a booth at the Apartment Association’s fall conference to add contacts, build relationships, and provide initial assessments of program eligibility. In particular, this program year benefitted from building relationships with property management companies overseeing a suite of properties. The three participating properties shared one corporate-level property manager, who conveyed the program to the three site-level property managers. Additionally, the team built a list of property manager contacts to send three to four seasonal electronic newsletters focusing on highlighted measures and postcards.

In PY17, the overall process did not change: after property managers completed the application, implementers assigned them to the low-income or market-rate delivery channel. Program staff determined the number of multifamily kits needed for each property using data collected during site visits. Implementation staff then sent multifamily kit items, totaling one multifamily kit per unit, regardless of the number of bathrooms in each unit. Property managers or their staff then established a timeline for installing the multifamily kit items. ICF implementation staff reported that they checked on installations of multifamily kit items by sampling a number of units from each building to check whether installation occurred.



## PY17 Program Changes

Ameren Missouri continued the Multifamily and school-based delivery channels in PY17, with some refinements.

New for PY17, Ameren Missouri co-delivered the school-based delivery channel with Spire, a local gas company; otherwise, implementers conducted the program very similarly to the PY16. In addition to the existing Ameren Missouri-only kit, the program added a “co-branded” version of the kit that included Spire branding. Both kit types contained the same contents.

As described, Ameren Missouri created separate targets for the two kit types: 12,000 co-branded kits and 4,000 Ameren Missouri-only kits. ICF reported the kit types sent by NEF and only reported a portion of hot water measures delivered in the school kits to account for anticipated electric hot water heater saturation. Additionally, NEF provided updated factual references in the materials and expanded the online portal to include more interactive activities and energy efficiency education. NEF reported that outreach targeted teachers more than principals, as in PY16, with emails, letters, and calls going to teachers in PY17.

The multifamily delivery channel continued in PY17, with a reduced target of 3,600 kits (compared to 10,000 in PY16). Ameren Missouri lowered the target for the program based on better-than-expected performance of other programs in the portfolio and the transition to implementing the multifamily delivery channel under the Low-Income multifamily program. The kit items remained the same as in PY17, except for adding two LED bulbs, totaling six LED bulbs per kit.

## Delivery Successes and Program Achievements

Stakeholders reported that the following program aspects worked particularly well:

- **Achieving the participation goal for the school-based delivery channel.** As in PY16, the school-based delivery channel achieved its participation goal overall and by kit type. According to NEF, the program filled quickly, and teachers expressed strong interest in participating next year.
- **Positive school kit stakeholder feedback.** Per NEF implementer staff, the program continued to receive positive feedback from the Missouri Department of Education, teachers (through their evaluation forms and classroom thank you notes), and parents and guardians (through the home energy worksheet comments).
- **Successful co-delivery of school kits with Spire.** Adding Spire to the school-based delivery channel allowed Ameren Missouri to share program delivery costs, while allowing Spire to claim savings and cover water-saving measures.

## Program Implementation Challenges and Potential Changes

- **Low enrollment in the multifamily kit delivery channel.** After a delayed start in PY16, the multifamily delivery channel increased enrollment in PY17, but it did not reach program targets. ICF observed that the program needed to add more properties. According to the implementer, enrollment was limited by the electric hot water heating requirement. ICF implementation staff

indicated that PY18 plans for partnering with a gas utility would increase the number of eligible multifamily properties and, consequently, the number of potential program participants. Further, the implementer reported that the installation timeline could be long due to requirements for facility staff to conduct installations, and competition with other demands on their time. At the time of the interviews, one project remained in the pipeline and was not completed by the end of PY17.

- **Planning for savings.** At the time of the interviews, program staff agreed that the current kit items worked well for both delivery channels; potential modifications arose when thinking more broadly about supporting portfolio-wide savings goals or maintaining savings over time in the face of increased measure saturations (e.g., LED bulbs). Due to the school kit delivery channel's easy scalability, the ICF implementer described the school kits program as a good "lever" for driving savings portfolio-wide by increasing the number of kits or LED bulbs included in the kits. ICF identified the possibility of applying pipe wrap to air conditioner or furnace applications.
- **Optimizing the school kit delivery channel.** While stakeholders agreed that the school kits delivery channel continued to perform well, they offered suggestions for optimizing the program. Because of the challenge to providing clear instructions for participating teachers in the absence of face-to-face contact, NEF implementers felt that program delivery could benefit from further refining the materials to communicate details with fewer words. NEF also supported emphasizing online resources, particularly for collecting teacher evaluations, HEW submissions, and providing additional energy efficiency education. The ICF implementers felt it would be helpful to improve the HEWs' return rate. In the face of success with the Ameren Missouri-Spire co-branding effort, Ameren Missouri program staff expressed interest in adding an Ameren Missouri gas partnership in the long-term.

## *Property Manager Surveys*

This section discusses responses from the PY17 phone survey of four property managers who participated in the multifamily delivery channel. To inform the process evaluation, the property manager survey covered topics such as program awareness; the participation process; and satisfaction with the program, kit items, and Ameren Missouri; and gathered data to calculate kit item installation rates, free ridership, and spillover. In PY17, program participants included one corporate-level property manager who acted as the decision maker for participating in the program, along with three site-level property managers at the same property management company who implemented the program at their sites. Accordingly, the survey targeted awareness, decision making, free ridership and spillover questions to the corporate-level property manager and installation and measure-specific satisfaction to the site-level property managers.

## **Program Awareness and Participation**

For participating properties, program marketing worked as intended and the Ameren Missouri program representative provided sufficient support. The corporate-level property manager learned of the program through a general Ameren Missouri representative and an Ameren Missouri representative

affiliated with the low-income program. In contrast, all three site-level property managers learned of the program through another property manager or co-worker, who was most likely the corporate-level property manager.

The corporate-level property manager expressed a variety of reasons for participating in the program, including providing a beneficial service to tenants, reducing tenant energy bills, reducing maintenance costs, benefitting the environment, and the program's free cost. The corporate-level property manager reported that the Ameren Missouri representative helped to procure the correct order of energy efficiency items for their properties, and strongly agreed that the program representative clearly explained the program's benefits for tenants and sufficiently answered their program questions. The survey did not direct these questions to site-level property managers.

As reported by participating property managers, the program experience varied somewhat from its design. Notably, more than four weeks elapsed between requesting and receiving the energy efficiency items, according to the corporate-level property manager. Although program materials included Ameren Missouri door hangers and pre- and post-installation letters, none of the four property managers recalled receiving the informational material. The property managers all reported drafting their own letters to tenants; the corporate-level property manager and one site-level property manager also reported that they contacted tenants by email.

## Program Satisfaction

Participating property managers felt positively about their program experience. Three out of four strongly agreed (and one somewhat agreed) that “[they were] satisfied with [their] experience in the Ameren Missouri Multifamily Efficient Kits Program.” When asked why they strongly agreed with the program satisfaction statement, property managers offered the following responses:

- “The whole process was painless. It was very efficient.”
- “Everything is fine.”
- “Offering those things was fantastic. It reduced our carbon footprint and bill. Everyone's looking for a way to improve. Residents appreciated it.”

The property manager who somewhat agreed with the statement reported that “One item that was sent failed, the air filter whistles. We do six-month safety checks for air filters, and no whistles went off, even though the filters were filthy. They didn't work correctly.”

All participating property managers said they would recommend the program to other property managers, citing the following reasons:

- “Improves residents' satisfaction. Saves energy. It's great for the environment, free, and gives (a) company a kickstart to look that way (products).”
- “Because it's worked great. Reduced water with showers. Happy with energy-saving lightbulbs. Residents were happy with it.”

- “It was a very thorough kit and addressed the main concerns to reduce energy and have savings.”
- “Especially because lightbulbs, aerators—they're all going to be savings to the property and the residents.”

## Measure Satisfaction

The evaluation team asked site-level multifamily property managers about their experiences with the various kit devices. LEDs, high-efficiency bathroom faucet aerators, and hot water pipe insulation received the highest possible satisfaction ratings (all three site-level property managers said they were *very satisfied* with these items from the kit), followed by high-efficiency showerheads (two property managers rated themselves as *very satisfied*, and one rated themselves as *somewhat satisfied*).

Respondents gave lower ratings to the kitchen faucet aerator (two said they were *very satisfied* and one said they were *not too satisfied*) and the dirty furnace filter alarm (one property manager each reported being *very satisfied*, *somewhat satisfied*, and *not satisfied at all*).

The survey asked respondents to provide reasons for the satisfaction ratings they assigned each measure. Table 14 lists the most common reasons cited for liking or disliking each kit item. Overall, respondents appreciated the measures’ high quality. One respondent liked that energy/utility bill savings for the LED light bulbs were at least as good as expected; another liked how the hot water pipe insulation provided more hot water and reduced the likelihood of frozen pipes in exposed units. One respondent did not like the low water pressure of the showerhead; and one considered the kitchen faucet aerator a poor-quality item. Two out of three respondents did not like the quality of the dirty furnace filter alarm, detailing how filter alarms did not go off, even though routine checks indicated the filters were dirty.

**Table 14. Reasons for Liking or Disliking Kit Measures**

Measure	Reasons for Liking Kit Items	Reasons for Disliking Kit Items
High-Efficiency Showerhead (n=3)	Item is of high quality	Low water pressure
High-Efficiency Kitchen Faucet Aerator (n=3)	Item is of high quality	Item is of poor quality
High-Efficiency Bathroom Faucet Aerator (n=3)	Item is of high quality	N/A
LED Light Bulbs (n=3)	Item is of high quality Amount of energy savings/utility bill savings is as expected or greater	N/A
Dirty Furnace Filter Alarm (n=3)	Item is of high quality	Item is of poor quality
Hot Water Pipe Insulation (n=3)	Item is of high quality; Provides more hot water Prevents frozen pipes in corner units	N/A

Survey question: D6. “Why are you [SATISFACTION RATING FROM D5] with the [KIT ITEM]? Please tell me further details about what you [LIKE/DISLIKE] about the energy efficiency item.” (Total n=3)

## Satisfaction with Ameren Missouri

Cadmus asked participating multifamily property managers about their satisfaction levels with Ameren Missouri as a utility. All four respondents were *very satisfied* with Ameren Missouri as an electric provider overall. Moreover, the multifamily delivery channel experience positively affected satisfaction with Ameren Missouri for two out of three respondents; the third said that their opinion stayed the same.

The team asked participating multifamily property managers about their reasons for their satisfaction levels with Ameren Missouri. The most important satisfaction driver was the service reliability offered by the utility.

## Suggestions to Improve the Program

On surveying participants about actions Ameren Missouri could take to improve the multifamily delivery channel, Cadmus received suggestions from two respondents. One suggested improving the program by providing more bulbs and items to upgrade more than one bathroom or kitchen, and asked for materials to explain the program to tenants. Another respondent suggested improving the dirty furnace filter alarms' performance.

## Student Family Surveys

This section discusses responses from the PY17 online survey of participating families who received the school kit. To augment the process evaluation, the student family survey covered topics such as satisfaction with the program, kit items, and Ameren Missouri, and gathered data to calculate kit item installation rates, free ridership, and spillover. About 298 respondents started the survey and, after taking into account incomplete responses, the team received 207 completed online student family surveys, and omitted blanks, "don't know," and "refused" from the total number of responses. As program delivery did not change significantly, this evaluation does not report detailed process evaluation results, unless the team identified a significant area of difference or concern. School Kit Survey Responses includes results of the school kit participant survey.

Cadmus asked home energy kit participants about their experiences with the various kit devices. Similarly to PY16, most respondents reported they were *very satisfied* or *somewhat satisfied* with each measure. In PY17, participants were less satisfied with the showerheads (84% *very satisfied* or *somewhat satisfied*, n=189) than in PY16, and, along with dirty furnace whistles and kitchen faucet aerators, showerheads received the lowest satisfaction ratings among the kit items.

## Gross Impact Evaluation Results

This section details Cadmus’s determination of each measure’s installation rate and calculations of per-unit savings for Ameren Missouri’s Energy Efficiency Kits program.

### Measure Installation Verification

As shown in Table 15, this section includes the installation rates of energy efficiency kit items. Installation rates derived from PY17 student family surveys for the school delivery channel, which Cadmus fielded in late February to early March, and from PY17 property manager surveys for the multifamily delivery channel, fielded in January. Based on PY17 survey results, in-service rates (ISR) for school kits measures declined compared to PY16 for showerheads, furnace filter alarms, and water heater pipe wrap, with slightly lower ISRs for bathroom aerators. In contrast, LED bulb and kitchen aerator installation rates did not change. In the absence of any substantive changes to the kit, a possible theory is that households participating in the first program year with older siblings and could not install further measures in their homes. The program does not track kits at the household level. The evaluation team attributed some of the lower installation rate for showerheads in PY17 to slightly higher removals, otherwise removals did not correlate with the lower installation rates.

**Table 15. Measure Installation**

Delivery Channel and Measure	PY17 Percentage Installed and Operating	PY16 Percentage Installed and Operating	Ex Ante Assumption
<b>School Kit</b>			
Energy-Efficient Showerhead	57%	65%	65%
Energy-Efficient Kitchen Faucet Aerator	53%	53%	53%
Energy-Efficient Bathroom Faucet Aerator	56%	57%	57%
LEDs	92%	92%	92%
Water Heater Pipe Wrap	66%	74%	74%
Furnace Filter Alarm	45%	47%	47%
<b>Multifamily Kit</b>			
Energy-Efficient Showerhead	100%	-	100%
Energy-Efficient Kitchen Faucet Aerator	100%	100%	100%
Energy-Efficient Bathroom Faucet Aerator	100%	100%	100%
LEDs	100%	98%	98%
Water Heater Pipe Wrap	100%	100%	100%
Furnace Filter Alarm	100%	-	100%

As shown in Table 16, the team used PY17 survey results to adjust gross savings for the school-based delivery channel. The team adjusted school savings using inputs from the surveys to account for the percentage of survey respondents that were Ameren Missouri customers and the proportion of Ameren Missouri customers who used electric water heating (see Appendix B).

In addition, LED savings were adjusted using the Uniform Methods Project methodology to account for bulbs not installed immediately but installed in subsequent years.<sup>2</sup> Program requirements for the multifamily delivery channel required participating properties to be Ameren Missouri customers with electric hot water heating.

**Table 16. Saturation Adjustments**

Delivery Channel and Measure	Electric Saturation	Ameren Missouri Customers	Ex Ante Electric Saturation Assumption	Ex Ante Ameren Missouri Customer Assumption
<b>School Kits</b>				
Energy-Efficient Showerhead	34%	90%	40%	86%
Energy-Efficient Kitchen Faucet Aerator	34%	90%	40%	86%
Energy-Efficient Bathroom Faucet Aerator	34%	90%	40%	86%
LEDs	100%	90%	100%	86%
Water Heater Pipe Wrap	34%	90%	100%	86%
Furnace Filter Alarm	100%	90%	n/a	86%
<b>Multifamily Kits</b>				
Energy-Efficient Showerhead	100%	100%	100%	100%
Energy-Efficient Kitchen Faucet Aerator	100%	100%	100%	100%
Energy-Efficient Bathroom Faucet Aerator	100%	100%	100%	100%
LEDs	100%	100%	100%	100%
Water Heater Pipe Wrap	100%	100%	100%	100%
Furnace Filter Alarm	n/a	100%	n/a	100%

## Measure-Specific Gross Savings

Cadmus estimated gross savings for the program measures using the engineering algorithms established in the Energy Efficiency Kits Evaluation Plan and repeated in the following sections.<sup>3</sup> For the furnace filter alarm, the team developed an algorithm using the State of Pennsylvania Technical Reference Manual (TRM),<sup>4</sup> and then compared the resulting values to deemed per-unit savings, as provided in Ameren Missouri’s 2017 TRM and available through the web-based interface to Cadmus’ gross savings estimates.

For each calculation in this section, the team provides a realization rate comparing the *Ex Ante* Savings/Unit (or the deemed per-unit TRM savings per unit) and the *Ex Post* Savings/Unit, which equals the team’s estimated savings per-unit. Calculations in this section provide per-unit savings estimates and

<sup>2</sup> Uniform Methods Project, Chapter 21: Residential Lighting, Published February 2015

<sup>3</sup> Cadmus. “Energy Efficiency Kits Evaluation Plan.” August 2016.

<sup>4</sup> Public Utilities Commission. *State of Pennsylvania Technical Reference Manual*. 2016. Available online: <http://www.puc.pa.gov/pcdocs/1370278.docx>

include adjustments for installation rates of kit items and for saturations of applicable electric heating and cooling equipment.

## Showerheads

Cadmus estimated energy-efficient showerhead savings using the following algorithm:

$$= \frac{\text{Energy Savings} \left( \frac{kWh}{\text{Year}} \right)}{3,413 \times RE \times \text{Showerheads}} \times \text{People} \times \text{Shower Time} \times \text{Days} \times \% \text{Days} \times \Delta \text{GPM} \times (T_{\text{SHOWER}} - T_{\text{IN}}) \times C_P \times \text{Den} \times \text{ISR} \times \text{Sat} \times \text{Util}$$

Where:

People	=	Number of people taking showers (ppl/household)
Shower Time	=	Average shower length (min/shower)
Days	=	Number of days per year (day/yr)
%Days	=	Number of showers per day, per person (shower/day-ppl)
ΔGPM	=	Difference in rated gallons per minute for the base showerhead and the new showerhead (gal/min)
T <sub>SHOWER</sub>	=	Average water temperature at the showerhead (°F)
T <sub>IN</sub>	=	Average inlet water temperature (°F)
C <sub>P</sub>	=	Specific heat of water (Btu/lb-°F)
Den	=	Water density (lbs/gal)
3,413	=	Conversion rate from Btu to kWh (Btu/kWh)
RE	=	Water heater's recovery efficiency
Showerheads	=	Number of showerheads used per home
ISR	=	Percent of measures installed and operating
Sat	=	Electric hot water heater saturation
Util	=	Percent of measures delivered to Ameren Missouri customers

Table 17 shows inputs for the engineering algorithm used to determine savings from showerheads, delivered both through the school kits and multifamily kits delivery channels. Inputs for the number of people per home and the number of showerheads per home differed between the two delivery channels. For both delivery channels, Cadmus updated these values based on PY17 survey data.



Table 17. Showerhead Savings Assumptions

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
People	4.3	PY17 Energy Efficiency Kits School Survey Results	2.0	PY17 Energy Efficiency Kits Property Manager Survey Results
Shower Time	7.8	Secondary Source <sup>1</sup>	7.8	Secondary Source <sup>1</sup>
Days	365	Conversion Factor (day/yr)	365	Conversion Factor (day/yr)
%Days	0.6	Secondary Source <sup>2</sup>	0.6	Secondary Source <sup>2</sup>
ΔGPM	0.85	PY17 Program Data <sup>3</sup>	0.85	PY17 Program Data <sup>3</sup>
T <sub>SHOWER</sub>	105	Illinois TRM <sup>4</sup>	105	Illinois TRM <sup>4</sup>
T <sub>IN</sub>	61.3	Ameren Missouri 2012 TRM <sup>5</sup>	61.3	Ameren Missouri 2012 TRM <sup>5</sup>
C <sub>p</sub>	1	Specific Heat of Water (Btu/lb-°F)	1	Specific Heat of Water (Btu/lb-°F)
Den	8.33	Density (lb/gal)	8.33	Density (lb/gal)
3,413	3,413	Conversion Factor (Btu/kWh)	3,413	Conversion Factor (Btu/kWh)
RE	0.98	Secondary Source <sup>6</sup>	0.98	Secondary Source <sup>6</sup>
Showerheads	2.0	PY17 Energy Efficiency Kits School Survey Results	1.22	PY17 Program Data
ISR	57%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
SAT	34%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

<sup>1</sup> Cadmus and Opinion Dynamics Evaluation Team. *Showerhead and Faucet Aerator Meter Study*. Memorandum prepared for Michigan Evaluation Working Group. pp 10. 2013.

<sup>2</sup> Ibid. pp. 11.

<sup>3</sup> The rated gallons per minute (gpm) for the new showerhead is 1.5 gpm, and the rated gpm for the base showerhead is 2.35, and came from the Illinois Statewide TRM for Energy Efficiency Version 5.0. pp. 184. 2016. Available Online:

[http://ilsagfiles.org/SAG\\_files/Technical\\_Reference\\_Manual/Version\\_5/Final/IL-TRM\\_Version\\_5.0\\_dated\\_February-11-2016\\_Final\\_Compiled\\_Volumes\\_1-4.pdf](http://ilsagfiles.org/SAG_files/Technical_Reference_Manual/Version_5/Final/IL-TRM_Version_5.0_dated_February-11-2016_Final_Compiled_Volumes_1-4.pdf)

<sup>4</sup> Ibid. pp. 103.

<sup>5</sup> *Ameren Missouri 2012 Technical Resource Manual*. Appendix A. pp. 43. Available online:

<https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935658483>

<sup>6</sup> National Renewable Energy Laboratory, Building America Research. *Recovery efficiency for electric hot water heater*. Benchmark definition, pp. 12. 2009. Available online: <http://www.nrel.gov/docs/fy10osti/47246.pdf>

Using this engineering algorithm, the team determined an adjusted *ex post* energy savings value of 59.4 kWh/year for each showerhead included in a school kit—a value approximately 81% of the program’s *ex ante* value (73.6 kWh/year), as shown in Table 18. Cadmus attributes the difference in estimates to a combination of lower-than-assumed installations and electric hot water heating saturation, moderated by higher-than-assumed utility provider proportion, based on values from Cadmus’ survey results.

Table 18. *Ex Ante* and *Ex Post* Comparison for School Kit Showerheads

<i>Ex Ante</i> Savings/Unit	<i>Ex Post</i> Savings/Unit	Realization Rate
73.6 kWh/yr	59.4 kWh/yr	81%

The team determined an *ex post* energy savings value of 262.6 kWh/year for each showerhead included in a multifamily kit. This value was approximately 127% of the program’s *ex ante* value (206.2 kWh/year), as shown in Table 19. The difference in estimates resulted from higher-than-assumed efficiency improvements based on updated program data (difference in rated gallons per minute for the base showerhead and the new showerhead), moderated by lower-than-assumed showerheads per home, based on values from Cadmus’ survey results.

**Table 19. Ex Ante and Ex Post Comparison for Multifamily Showerheads**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
206.2 kWh/yr	262.6 kWh/yr	127%

## Kitchen Faucet Aerators

Cadmus evaluated kitchen and bathroom faucet aerators separately. The team estimated per-unit savings for kitchen faucet aerators using the following algorithm:

$$\text{Energy Savings} \left( \frac{\text{kWh}}{\text{Year}} \right) = \frac{\text{People} \times \text{Faucet Time} \times \text{Days} \times \Delta\text{GPM} \times (T_{\text{FAUCET}} - T_{\text{IN}}) \times C_P \times \text{Den} \times \text{DF} \times \text{ISR} \times \text{Sat} \times \text{Util}}{3,413 \times \text{RE} \times \text{Number of Faucets}}$$

Where:

- People = Number of people using faucet aerators (people/household)
- Faucet Time = Average length of faucet use per day (minutes/day)
- Days = Number of days per year (day/yr)
- ΔGPM = Difference in rated gallons per minute between the base unit and the new unit (gal/min)
- ΔT = Temperature at the tap minus the temperature at the water main
- T<sub>FAUCET</sub> = Average water temperature out of the faucet (°F)
- T<sub>IN</sub> = Average inlet water temperature (°F)
- C<sub>P</sub> = Specific water heat (Btu/lb-°F)
- Den = Water density (lb/gal)
- DF = Drain factor
- 3,413 = Conversion rate from Btu to kWh (Btu/kWh)
- RE = Water heater’s recovery efficiency
- Number of faucets = Number of used faucets per home
- ISR = Percent of measures installed and operating
- Sat = Electric hot water heater saturation
- Util = Percent of measures delivered to Ameren Missouri customers

Table 20 shows the engineering algorithm inputs used to determine savings from kitchen faucet aerators, delivered through both the school kits and multifamily kits delivery channels. The inputs for the number of people per home and the number of faucets per home differed between the two delivery channels. For both delivery channels, Cadmus updated these values based on PY17 survey data; for the multifamily delivery channel, the team also used values from PY17 program data. Additionally, the faucet time values varied for the School versus Multifamily channels from different secondary sources applicable to each type.

**Table 20. Kitchen Faucet Aerator Savings Assumptions**

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
People	4.3	PY17 Energy Efficiency Kits School Survey Results	2.02	PY17 Energy Efficiency Kits Property Manager Survey Results
Faucet Time	4.5	Secondary Source <sup>1</sup>	3.7	Secondary Source <sup>2</sup>
Days	365	Conversion Factor (day/yr)	365	Conversion Factor (day/yr)
ΔGPM	0.7	PY17 Program Data <sup>3</sup>	0.7	PY17 Program Data <sup>3</sup>
T <sub>FAUCET</sub>	93	Illinois TRM <sup>4</sup>	93	Illinois TRM <sup>4</sup>
T <sub>IN</sub>	61.3	Ameren Missouri 2012 TRM <sup>5</sup>	61.3	Ameren Missouri 2012 TRM <sup>5</sup>
CP	1	Specific Heat of Water (Btu/lb-°F)	1	Specific Heat of Water (Btu/lb-°F)
Den	8.33	Density (lb/gal)	8.33	Density (lb/gal)
DF	0.75	Drain Factor <sup>6</sup>	0.75	Drain Factor <sup>6</sup>
3,413	3,413	Conversion Factor (Btu/kWh)	3,413	Conversion Factor (Btu/kWh)
RE	0.98	Secondary Source <sup>7</sup>	0.98	Secondary Source <sup>7</sup>
Number of Faucets	1.2	PY17 Energy Efficiency Kits School Survey Results	1.00	PY17 Program Data
ISR	53%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
SAT	34%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

<sup>1</sup> Cadmus and Opinion Dynamics Evaluation Team 2013. pp. 10.

<sup>2</sup> PY11 MFIQ Metering Study.

<sup>3</sup> The new faucet aerator is rated at 1.5 gpm, and the base faucet aerator is rated at 2.2 gpm, which is the federal-rated maximum flow rate for faucets (10CFR430.32 (p) (DOE 1998).

<sup>4</sup> *Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0*. pp. 178. 2016. Available online: [http://ilsagfiles.org/SAG\\_files/Technical\\_Reference\\_Manual/Version\\_5/Final/IL-TRM\\_Version\\_5.0\\_dated\\_February-11-2016\\_Final\\_Compiled\\_Volumes\\_1-4.pdf](http://ilsagfiles.org/SAG_files/Technical_Reference_Manual/Version_5/Final/IL-TRM_Version_5.0_dated_February-11-2016_Final_Compiled_Volumes_1-4.pdf)

<sup>5</sup> *Ameren Missouri 2012 Technical Resource Manual*. Appendix A. pp. 43. Available online:

<https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935658483>

<sup>6</sup> *Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0*. pp. 175. 2016. Available online:

[http://ilsagfiles.org/SAG\\_files/Technical\\_Reference\\_Manual/Version\\_5/Final/IL-TRM\\_Version\\_5.0\\_dated\\_February-11-2016\\_Final\\_Compiled\\_Volumes\\_1-4.pdf](http://ilsagfiles.org/SAG_files/Technical_Reference_Manual/Version_5/Final/IL-TRM_Version_5.0_dated_February-11-2016_Final_Compiled_Volumes_1-4.pdf)

<sup>7</sup> NREL 2009. pp. 12.

Using this engineering algorithm, the team determined an *ex post* energy savings value of 40.7 kWh/year for each kitchen faucet aerator included in a school kit. This value was approximately

89% of the program’s *ex ante* value (45.9 kWh/year), as shown in Table 21. The estimates differed primarily due to lower- than- assumed electric hot water heating saturation and, to a lesser extent, on higher-than-assumed utility saturation, based on values from Cadmus’ survey results.

**Table 21. *Ex Ante* and *Ex Post* Comparison for School Kit Kitchen Faucet Aerators**

<i>Ex Ante</i> Savings/Unit	<i>Ex Post</i> Savings/Unit	Realization Rate
45.9 kWh/yr	40.7 kWh/yr	89%

The team determined an *ex post* energy savings value of 113.2 kWh/year for each kitchen faucet aerator included in a multifamily kit. This value was approximately 98% of the program’s *ex ante* value (115.9 kWh/year), as shown in Table 22. Based on PY17 survey results, Cadmus made a very small downward adjustment to the number of people per household.

**Table 22. *Ex Ante* and *Ex Post* Comparison for Multifamily Kitchen Faucet Aerators**

<i>Ex Ante</i> Savings/Unit	<i>Ex Post</i> Savings/Unit	Realization Rate
115.9 kWh/yr	113.2 kWh/yr	98%

## Bathroom Faucet Aerators

The team estimated per-unit savings for bathroom faucet aerators using the following algorithm:

$$= \frac{\text{Energy Savings} \left( \frac{\text{kWh}}{\text{Year}} \right)}{3,413 \times RE \times \text{Number of Faucets}} = \frac{\text{People} \times \text{Faucet Time} \times \text{Days} \times \Delta GPM \times (T_{\text{FAUCET}} - T_{\text{IN}}) \times C_p \times \text{Den} \times DF \times \text{ISR} \times \text{Sat} \times \text{Util}}{3,413 \times RE \times \text{Number of Faucets}}$$

Where:

- People = Number of people using faucet aerators (people/household)
- Faucet Time = Average length of faucet use per day (minutes/day)
- Days = Number of days per year (day/yr)
- ΔGPM = Difference in rated gpm between the base unit and the new unit (gal/min)
- ΔT = Temperature at the tap minus the temperature at the water main
- T<sub>FAUCET</sub> = Average water temperature out of the faucet (°F)
- T<sub>IN</sub> = Average inlet water temperature (°F)
- C<sub>p</sub> = Specific heat of water (Btu/lb-°F)
- Den = Water density (lb/gal)
- DF = Drain Factor
- 3,413 = Conversion rate from Btu to kWh (Btu/kWh)
- RE = Water heater’s recovery efficiency
- Number of faucets = Number of used faucets per home

ISR	=	Percent of measures installed and operating
Sat	=	Electric hot water heater saturation
Util	=	Percent of measures delivered to Ameren Missouri customers

Table 23 shows the engineering algorithm inputs used to determine savings from bathroom faucet aerators, delivered through both the school kits and multifamily kits delivery channels. The inputs for the number of people per home and the number of faucets per home differed between the two delivery channels. For both delivery channels, the team updated these values based on PY17 survey data.

**Table 23. Bathroom Faucet Aerator Savings Assumptions**

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
People	4.3	PY17 Energy Efficiency Kits School Survey Results	2.02	PY17 Energy Efficiency Kits Property Manager Survey Results
Faucet Time	1.6	Secondary Source <sup>1</sup>	1.6	Secondary Source <sup>1</sup>
Days	365	Conversion Factor (day/yr)	365	Conversion Factor (day/yr)
ΔGPM	0.7	PY17 Program Data <sup>2</sup>	0.7	PY17 Program Data <sup>2</sup>
T <sub>FAUCET</sub>	86	Illinois TRM <sup>3</sup>	86	Illinois TRM <sup>3</sup>
T <sub>IN</sub>	61.3	Ameren Missouri 2012 TRM <sup>4</sup>	61.3	Ameren Missouri 2012 TRM <sup>4</sup>
CP	1	Specific Heat of Water (Btu/lb-°F)	1	Specific Heat of Water (Btu/lb-oF)
Den	8.33	Density (lb/gal)	8.33	Density (lb/gal)
DF	0.9	Drain Factor <sup>5</sup>	0.9	Drain Factor <sup>5</sup>
3,413	3,413	Conversion Factor (Btu/kWh)	3,413	Conversion Factor (Btu/kWh)
RE	0.98	Secondary Source <sup>6</sup>	0.98	Secondary Source <sup>6</sup>
Number of Faucets	2.4	PY17 Energy Efficiency Kits School Survey Results	1.22	PY17 Program Data
ISR	56%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
SAT	34%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

<sup>1</sup> Cadmus and Opinion Dynamics Evaluation Team. *Showerhead and Faucet Aerator Meter Study*. Memorandum prepared for Michigan Evaluation Working Group. 2013. pp. 10.

<sup>2</sup> The rated gpm for the new faucet aerator is based on PY17 program data and the rated gpm for the base faucet aerator will be 2.2 gpm, which is the federal rated maximum flow rate for faucets (DOE 1998).

<sup>3</sup> *Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0*. pp. 178. 2016. Available online: [http://ilsagfiles.org/SAG\\_files/Technical\\_Reference\\_Manual/Version\\_5/Final/IL-TRM\\_Version\\_5.0\\_dated\\_February-11-2016\\_Final\\_Compiled\\_Volumes\\_1-4.pdf](http://ilsagfiles.org/SAG_files/Technical_Reference_Manual/Version_5/Final/IL-TRM_Version_5.0_dated_February-11-2016_Final_Compiled_Volumes_1-4.pdf)

<sup>4</sup> *Ameren Missouri 2012 Technical Resource Manual*. Appendix A. pp. 43. Available online: <https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935658483>

<sup>5</sup> *Illinois Statewide Technical Reference Manual for Energy Efficiency Version 5.0*. pp. 175. 2016. Available online: [http://ilsagfiles.org/SAG\\_files/Technical\\_Reference\\_Manual/Version\\_5/Final/IL-TRM\\_Version\\_5.0\\_dated\\_February-11-2016\\_Final\\_Compiled\\_Volumes\\_1-4.pdf](http://ilsagfiles.org/SAG_files/Technical_Reference_Manual/Version_5/Final/IL-TRM_Version_5.0_dated_February-11-2016_Final_Compiled_Volumes_1-4.pdf)

<sup>6</sup> NREL 2009. pp. 12.

Using this engineering algorithm, the team determined an *ex post* energy savings value of 7.0 kWh/year for each bathroom faucet aerator included in a school kit. This value was approximately 87% of the program’s *ex ante* value (8.0 kWh/year), as shown in Table 24. Cadmus attributes the difference in estimates to a combination of lower- than- assumed electric hot water heating saturation and slightly higher-than-assumed utility saturation, based on values from Cadmus’ survey results.

**Table 24. Ex Ante and Ex Post Comparison for School Kit Bathroom Faucet Aerators**

<i>Ex Ante</i> Savings/Unit	<i>Ex Post</i> Savings/Unit	Realization Rate
7.96 kWh/yr	7.0 kWh/yr	87%

The team determined an *ex post* energy savings value of 37.6 kWh/year for each bathroom faucet aerator included in a multifamily kit. This value was approximately 112% of the program’s *ex ante* value (33.5 kWh/year), as shown in Table 25. Differences stemmed from PY17 survey results that indicated slightly fewer faucets used per home than assumed.

**Table 25. Ex Ante and Ex Post Comparison for Multifamily Bathroom Faucet Aerators**

<i>Ex Ante</i> Savings/Unit	<i>Ex Post</i> Savings/Unit	Realization Rate
33.5 kWh/yr	37.6 kWh/yr	112%

## LEDs

Cadmus estimated per-unit savings for LEDs using the following algorithm:

$$= \frac{\text{Energy Savings (kWh/Year)}}{1,000} = \frac{(Watt_{Base} - Watt_{EE}) \times Hours_{RES} \times Days}{1,000} \times WHF \times UMP \times Util$$

Where:

- Watt<sub>Base</sub> = Wattage of the original incandescent bulb replaced by LED
- Watt<sub>EE</sub> = Wattage of new LED installed
- Hours<sub>RES</sub> = Average hours of use per day
- Days = Days used per year
- 1,000 = The conversion factor from Wh to kWh
- WHF = Waste heat factor (to account for interactive effects)
- UMP = UMP predicted percent of measures installed and operating
- Util = Percent of measures delivered to Ameren Missouri customers

Table 26 provides assumptions for LED savings. The team will use the same engineering algorithm and inputs for school and multifamily kits, but different adjustments, according to the delivery channel.

**Table 26. LED Savings Assumptions**

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
Watts <sub>Base</sub>	43	The lumen-equivalent halogen wattage for LEDs	43	The lumen-equivalent halogen wattage for LEDs
Watts <sub>EE</sub>	9	9-watt ENERGY STAR LEDs with 800 lumen output	9	9-watt ENERGY STAR LEDs with 800 lumen output
Hours <sub>RES</sub>	2.7	2017 Ameren Missouri Lighting study	2.7	2017 Ameren Missouri Lighting study
Days	365	Conversion Factor (day/yr)	365	Conversion Factor (day/yr)
1,000	1,000	Conversion Factor (Wh/kWh)	1,000	Conversion Factor (Wh/kWh)
WHF	0.99	2017 Ameren Missouri Lighting study	0.99	2017 Ameren Missouri Lighting study
UMP	92%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

Using this engineering algorithm, the team determined an *ex post* energy savings value of 27.8 kWh/year for each LED bulb distributed in the school kits. This value was approximately 93% of the program’s *ex ante* value (29.8 kWh/year), as shown in Table 27. The team adopted updated hours of use values from the PY17 Lighting Study that were lower-than-assumed, which primarily caused the difference in values, which was combined with small increase in the utility saturation and reduced ISR.

**Table 27. Ex Ante and Ex Post Comparison for School Kit LEDs**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
29.8 kWh/yr	27.8 kWh/yr	93%

Using this engineering algorithm, the team determined an *ex post* energy savings value of 33.5 kWh/year for each LED bulb distributed in the multifamily kits. This value was approximately 90% of the program’s *ex ante* value (37.2 kWh/year), as shown in Table 28. As in the school kits channel, the difference between values resulted from lower-than-assumed hours of use.

**Table 28. Ex Ante and Ex Post Comparison for Multifamily Kit LEDs**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
37.2 kWh/yr	33.5 kWh/yr	90%

## Water Heater Pipe Wrap

Cadmus estimated per-unit savings from pipe wrap using the following algorithm, updated in PY17:

$$\Delta kWh = ((C_{Base}/R_{Base} - C_{EE}/R_{EE}) * L * \Delta T * Hours) / (\eta_{DHW_{Elec}} * 3,412) \times ISR \times Sat \times Util$$

Where:

$C_{BASE}$	=	Circumference (feet) of uninsulated pipe with 0.75-inch diameter
$R_{BASE}$	=	Thermal resistance coefficient (hr-°F-ft <sup>2</sup> )/Btu) of uninsulated pipe
$C_{EE}$	=	Circumference (ft) of insulated pipe = diameter (in) * $\pi/12$
$R_{EE}$	=	Thermal resistance coefficient (hr-°F-ft <sup>2</sup> )/Btu) of insulated pipe
L	=	Length of pipe from a water heating source covered by pipe wrap (in feet)
$\Delta T$	=	Average temperature difference between supplied hot water and ambient air temperatures (°F)
Hours	=	Hours per year
$\eta_{DHWElec}$	=	Recovery efficiency of the electric hot water heater
3,412	=	The conversion rate from Btu to kWh (Btu/kWh)
ISR	=	Percent of measures installed and operating
Sat	=	Electric hot water heater saturation
Util	=	Percent of measures delivered to Ameren Missouri customers

Table 29 shows inputs for the engineering algorithm used to determine savings for one foot of pipe wrap, delivered both through the school kits and multifamily kits delivery channels.



Table 29. Pipe Wrap Savings Assumptions

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
C <sub>BASE</sub>	0.196	PY16 Energy Efficiency Kits Program: TRM Gross Savings Memo	0.196	PY16 Energy Efficiency Kits Program: TRM Gross Savings Memo
R <sub>BASE</sub>	1	Illinois TRM <sup>1</sup>	1	Illinois TRM <sup>1</sup>
C <sub>EE</sub>	0.589	PY16 Energy Efficiency Kits Program: TRM Gross Savings Memo	0.589	PY16 Energy Efficiency Kits Program: TRM Gross Savings Memo
R <sub>EE</sub>	5	PY17 Program Data	5	PY17 Program Data
L	1	PY17 Program Data	1	PY17 Program Data
ΔT	60	Illinois TRM <sup>1</sup>	60	Illinois TRM <sup>1</sup>
Hours	8766	Conversion Factor (hrs/yr)	8766	Conversion Factor (hrs/yr)
η <sub>DHWElec</sub>	0.98	Illinois TRM <sup>1</sup>	0.98	Illinois TRM <sup>1</sup>
3,412	3,412	Conversion Factor (Btu to kWh)	3,412	Conversion Factor (Btu to kWh) <sup>1</sup>
ISR	66%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
SAT	34%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

<sup>1</sup> Illinois Statewide Technical Reference Manual for Energy Efficiency Version 6.0. pp. 168. 2017. Available online: [http://www.ilsag.info/il\\_trm\\_version\\_6.html](http://www.ilsag.info/il_trm_version_6.html).

In contrast to other hot water heating measures, the Ameren Missouri TRM savings value for hot water heater pipe wrap did not include an adjustment for electric hot water heating saturation. In the Vision database, the total program savings reflected electric hot water heating saturation for all hot water heating measures, including pipe wrap, by counting 15% of the measures distributed in school kits (Spire claimed savings for the remainder of measures). Using the engineering algorithm above, and including adjustments for electric hot water heating saturations, the team determined an *ex post* energy savings value of 2.5 kWh/year per one foot of pipe wrap included in a school kit. To directly compare the *ex post* energy savings with the *ex ante* value, the team also calculated the per unit savings without adjusting for hot water heating saturation. Without the hot water saturation adjustment, Cadmus estimated 7.3 kWh/yr for this measure, which was 67% of the program’s *ex ante* value (11.0 kWh/year), shown in Table 30. The difference in estimates resulted from differences in calculations of *ex ante* savings, stemming from inputs for R-value, temperature differences between the hot water and air temperature, and for consistency between hours of use and days per year. The *ex ante* calculation assumes 365.25 days per year, but 8,760, rather than 8,766 hours of use to reflect that amount of time.

**Table 30. Ex Ante and Ex Post Comparison for School Kit Pipe Wrap**

Ex Ante Savings/Unit <sup>1</sup>	Ex Post Savings/Unit	Realization Rate
<b>Without Electric Hot Water Heater Adjustment (Comparable to TRM)</b>		
11.0 kWh/yr	7.3 kWh/yr	67%
<b>Final Adjusted</b>		
11.0 kWh/yr	2.5 kWh/yr	23%

<sup>1</sup>The Ameren Missouri TRM value for hot water heater pipe wrap did not adjust for electric hot water heating saturation, specifically that Ameren Missouri only paid for 15% of pipe wrap. Adjusting the *ex ante* estimates to account for the 15% that Ameren Missouri paid for, *ex ante* savings would be 1.65 kWh/year (15% of 11.0 kWh/yr) which is equivalent to 152% realization rate (2.5 kWh/yr *ex post*, compared to 1.65 kWh/year *ex ante* with pipe wrap adjustment).

The team determined an *ex post* energy savings value of 12.4 kWh/year for each foot of pipe wrap included in a multifamily kit. This value was approximately 71% of the program’s *ex ante* value (17.4 kWh/year), as shown in Table 31. The difference between estimates resulted from calculations of *ex ante* savings values, described above.

**Table 31. Ex Ante and Ex Post Comparison for Multifamily Kit Pipe Wrap**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
<b>Without Electric Hot Water Heater Adjustment (Comparable to TRM)</b>		
17.4 kWh/yr	12.4 kWh/yr	71%
<b>Final Adjusted</b>		
17.4 kWh/yr	12.4 kWh/yr	71%

### Furnace Filter Alarms

The furnace filter alarm is designed to save energy at the heating or cooling equipment motor by alerting homeowners that the filter needs to be changed. Cadmus estimated furnace filter alarm savings using the following algorithm for alarms delivered both through the school kits and multifamily kits delivery channels:

$$\Delta kWh/yr = \left( \frac{\Delta kWh}{yr_{heat}} + \frac{\Delta kWh}{yr_{cool}} \right) \times ISR \times Util$$

$$\frac{\Delta kWh}{yr_{heat}} = kW_{motor} \times EFLH_{heat} \times EI$$

$$\frac{\Delta kWh}{yr_{cool}} = kW_{motor} \times EFLH_{cool} \times EI$$

Where:

- kW<sub>motor</sub> = Average motor full load electric demand (kW)
- EFLH<sub>heat</sub> = Estimated full-load heating hours for region (hours/year)
- EFLH<sub>cool</sub> = Estimated full-load cooling hours for region (hours/year)
- EI = Efficiency improvement (%)

- ISR = Percent of measures installed and operating
- Util = Percent of measures delivered to Ameren Missouri customers

Table 32 shows input values used in the furnace filter alarm algorithm and their sources.

**Table 32. Furnace Filter Alarm Savings Assumptions**

Term	Value: School	Source: School	Value: Multifamily	Source: Multifamily
$kW_{motor}$	0.5	Pennsylvania TRM <sup>1</sup>	0.5	Pennsylvania TRM <sup>1</sup>
$EFLH_{heat}$	1,496	PY16 Heating and Cooling Metering Study	1,496	PY16 Heating and Cooling Metering Study
$EFLH_{cool}$	602	Ameren Missouri 2012 TRM <sup>2</sup>	602	Ameren Missouri 2012 TRM <sup>2</sup>
El	15%	Pennsylvania TRM <sup>1</sup>	15%	Pennsylvania TRM <sup>1</sup>
ISR	45%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data
Util	90%	PY17 Energy Efficiency Kits School Survey Results	100%	PY17 Program Data

<sup>1</sup> Public Utilities Commission. *State of Pennsylvania Technical Reference Manual*. pp 73. 2016. Available online:

<http://www.puc.pa.gov/pcdocs/1370278.docx>

<sup>2</sup> Ameren Missouri 2012 *Technical Resource Manual*. Appendix A. Available online:

<https://www.efis.psc.mo.gov/mpsc/commoncomponents/viewdocument.asp?DocId=935658483>

Using the engineering algorithm above, the team determined an *ex post* energy savings value of 64.3 kWh/year for each furnace filter alarm distributed in the school kits. This value was approximately 94% of the program’s *ex ante* value (68.5 kWh/year), as shown in Table 33. The team adjusted the cooling EFLH and heating EFLH based on student family participant survey results. Surveys indicated that 86% of households that received furnace filter alarms would have savings through their heating systems and 97% through their cooling systems. Differences between values resulted from slightly lower-than-assumed ISR, based on values from Cadmus’ survey results.

**Table 33. Ex Ante and Ex Post Comparison for School Kit Furnace Filter Alarm**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
68.5 kWh/yr	64.3 kWh/yr	94%

Using this engineering algorithm, the team determined an *ex post* energy savings value of 177.4 kWh/year for each furnace filter alarm distributed in the multifamily kits, approximately 91% of the program’s *ex ante* value (195.8 kWh/year), as shown in Table 34. Differences resulted from differences in calculations of *ex ante* savings, stemming from Equivalent Full Load Hours for heating and cooling.

**Table 34. Ex Ante and Ex Post Comparison for Multifamily Kit Furnace Filter Alarm**

Ex Ante Savings/Unit	Ex Post Savings/Unit	Realization Rate
195.8 kWh/yr	177.4 kWh/yr	91%

## Summary

Table 35 lists per-unit, *ex ante* and *ex post* gross savings by measure.

**Table 35. PY17 Summary: Comparison of *Ex Ante* and *Ex Post* Per-Unit Gross Savings**

Measure	Per Unit <i>Ex Ante</i> (kWh/yr)	Per Unit <i>Ex Post</i> (kWh/yr)	Realization Rate
<b>School Kit</b>			
Energy-Efficient Showerhead	73.6	59.4	81%
Energy-Efficient Kitchen Faucet Aerator	45.9	40.7	89%
Energy-Efficient Bathroom Faucet Aerator	7.96	7.0	87%
LEDs	29.8	27.8	93%
Water Heater Pipe Wrap <sup>1</sup>	11.0	2.5	23%
Furnace Filter Alarm	68.5	64.3	94%
<b>Multifamily Kit</b>			
Energy-Efficient Showerhead	206.2	262.6	127%
Energy-Efficient Kitchen Faucet Aerator	115.9	113.2	98%
Energy-Efficient Bathroom Faucet Aerator	33.5	37.6	112%
LEDs	37.2	33.5	90%
Water Heater Pipe Wrap	17.4	12.4	71%
Furnace Filter Alarm	195.8	177.4	91%

<sup>1</sup>The Ameren Missouri TRM value for hot water heater pipe wrap did not adjust for electric hot water heating saturations. Without electric hot water heating saturation adjustments, the *ex post* savings value for pipe wrap was 7.3 kWh/yr, with a 67% realization rate.

To estimate the program’s total gross energy savings, the team applied the per-unit *ex post* values shown in Table 35 to the number of measures distributed. The per-unit *ex post* values already included adjustments for percentages installed and operating, electric water heating saturations, and whether school kits were installed by an Ameren Missouri Customer (as shown in Table 36).

**Table 36. PY17 Summary: Ex Post Program Gross Savings Accounting for Installation Rates**

Measure	PY17 Participation	Per-Unit Ex Post Savings (kWh/hr)*	Percent Installed and Operating	Saturation	Ameren Missouri Customers	Total Ex Post Savings (kWh/yr)
<b>School Kit</b>						
Energy-Efficient Showerhead	16,117	59.38	57%	34%	90%	957,023
Energy-Efficient Kitchen Faucet Aerator	16,117	40.74	53%	34%	90%	656,631
Energy-Efficient Bathroom Faucet Aerator	16,117	6.95	56%	34%	90%	112,019
LEDs	64,468	27.76	92%	100%	90%	1,789,913
Water Heater Pipe Wrap	48,351	2.53	66%	34%	90%	122,160
Furnace Filter Alarm	16,117	64.25	45%	100%	90%	1,035,570
<b>Multifamily Kit</b>						
Energy-Efficient Showerhead	862	262.60	100%	100%	100%	226,360
Energy-Efficient Kitchen Faucet Aerator	862	113.15	100%	100%	100%	97,536
Energy-Efficient Bathroom Faucet Aerator	862	37.61	100%	100%	100%	32,420
LEDs	5,172	33.54	100%	100%	100%	173,472
Water Heater Pipe Wrap	876	12.35	100%	100%	100%	10,822
Furnace Filter Alarm	862	177.38	100%	100%	100%	152,897
<b>Total</b>	<b>186,783</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5,366,822</b>

\* Adjusted to reflect ISR, saturation, and utility.

## Net Impact Evaluation Results

Cadmus determined total program net impacts by calculating total gross savings by measure group and then applying the following:

- Participant Free Ridership
- Participant Spillover
- NPSO

Cadmus estimated participant free ridership and participant spillover ratios for school kit participants using surveys completed during PY17.

The multifamily kits delivery channel participant free ridership and participant spillover ratios were estimated from an interview conducted with a corporate level project manager who supervised the installation of energy-efficient kit measures in the three properties participating in the program.

Free ridership equals the percentage of savings that would likely have occurred in a program’s absence. As free rider measures incur program costs but provide none of its benefits, they decrease a program’s net savings.

Participant spillover equals savings that occur when program participants undertake additional energy-efficiency measures or perform energy-efficient activities without receiving financial assistance from the program. Unlike free ridership, spillover savings do not generate program costs; rather, they generate energy-saving benefits which increase net savings.

Similarly, NPSO is a result of program or general energy-efficiency marketing and education that caused nonparticipating customers to undertake additional energy-efficiency measures or perform energy-efficient activities without financial assistance. Cadmus conducted a survey with 2,373 nonparticipating Ameren Missouri customers (from Ameren Missouri’s residential customer database) to assess the influence of the program on their decision to purchase or implement energy-efficient measures without a program incentive.

To calculate the Energy Efficiency Kit program’s NTG, Cadmus used the following formula:

$$NTG = 1 - Freeridership + Participant\ Spillover$$

Cadmus applied the resulting NTG ratio to *ex post* gross savings for each program measure to calculate net savings for the program measures, and then added Energy Efficiency Kits program-generated NPSO savings to arrive at total net program savings. Because NPSO is of significant size and does not have the same load shape as the program, we did not include NPSO in the NTG ratio associated with the program, but rather added the net energy and demand impacts separately.

Table 37 presents PY17 program net impacts.

Table 37. PY17 Net Impact Results Summary

Program Measure	Ex Post Gross Savings (MWh/yr)	Free Ridership	Participant Spillover	NTG (w/o NPSO)	Net Savings (MWh/yr)
<b>School Kits</b>					
Energy-Efficient Showerhead	957	23.0%	23.0%	100.0%	957
Energy-Efficient Kitchen Faucet Aerator	657	27.0%	23.0%	96.0%	630
Energy-Efficient Bathroom Faucet Aerator	112	18.0%	23.0%	105.0%	118
LEDs	1,790	46.0%	23.0%	77.0%	1,378
Water Heater Pipe Wrap	122	18.0%	23.0%	105.0%	128
Furnace Filter Alarm	1,036	19.0%	23.0%	104.0%	1,077
<b>Subtotal</b>	<b>4,673</b>	<b>31.2%</b>	<b>23.0%</b>	<b>91.8%</b>	<b>4,289</b>
<b>Multifamily Kits</b>					
Energy-Efficient Showerhead	226	0.0%	0.0%	100.0%	226
Energy-Efficient Kitchen Faucet Aerator	98	0.0%	0.0%	100.0%	98
Energy-Efficient Bathroom Faucet Aerator	32	0.0%	0.0%	100.0%	32
LEDs	173	0.0%	0.0%	100.0%	173
Water Heater Pipe Wrap	11	0.0%	0.0%	100.0%	11
Furnace Filter Alarm	153	0.0%	0.0%	100.0%	153
<b>Subtotal</b>	<b>694</b>	<b>0.0%</b>	<b>0.0%</b>	<b>100.0%</b>	<b>694</b>
<b>NPSO</b>					<b>22</b>
<b>Program Total</b>	<b>5,367</b>	<b>27.2%</b>	<b>20.0%</b>	<b>92.8%</b>	<b>5,004</b>

## School Kit Free Ridership Results

Cadmus used a participant self-report approach to determine free ridership ratios for 166 participants who installed at least one item provided in the kit. This approach used questions that focused on the following key areas:

- Would the survey respondent have installed the measures without the program?
- In the program’s absence, when would the survey respondent have installed the measures?

## Free Ridership Scoring

Through analysis of answers to these core questions, the team assigned school kit recipients’ measure-level free ridership scores of 0% to 100%, then calculated an average free ridership score for each measure offered as part of the Energy Efficiency Kits Program. The following process determined a participant’s free ridership score:

- The team categorized customers as 0% free riders if:
  - They had no plans to install the measure in the program’s absence
  - They would not have installed the measure within one year in the program’s absence
- The team categorized a customer’s measure at 100% free ridership if they would have installed the same measure at the same time in the program’s absence

- The team assigned a 50% free ridership score to a customer’s measure if they would have purchased and installed the measure later, but within the same year they received the kit
- The team assigned a 12.5% free ridership score to a customer’s measure if they would have purchased and installed the measure, but did not know exactly when they would have done so<sup>5</sup>

## Free Ridership Results

After translating survey responses into each participant’s free ridership score, the team calculated an average free ridership estimate, weighted by evaluated savings, for each kit measure. Table 38 provides PY17 free ridership estimates by measure.

**Table 38. Energy Efficiency Kits Free Ridership Results**

Program Measure	n	Total Weighted Free Ridership Estimate*
<b>School Kits</b>		
Energy-Efficient Showerhead	250	21.1%
Energy-Efficient Kitchen Faucet Aerator	213	15.4%
Energy-Efficient Bathroom Faucet Aerator	226	12.0%
LEDs	382	49.8%
Water Heater Pipe Wrap	274	18.6%
Furnace Filter Alarm	194	10.5%
<b>Multifamily Kits*</b>		
Energy-Efficient Showerhead	1	0.0%
Energy-Efficient Kitchen Faucet Aerator	1	0.0%
Energy-Efficient Bathroom Faucet Aerator	1	0.0%
LEDs	1	0.0%
Water Heater Pipe Wrap	1	0.0%
Furnace Filter Alarm	1	0.0%

\*Estimates are weighted by *ex post* gross program savings.

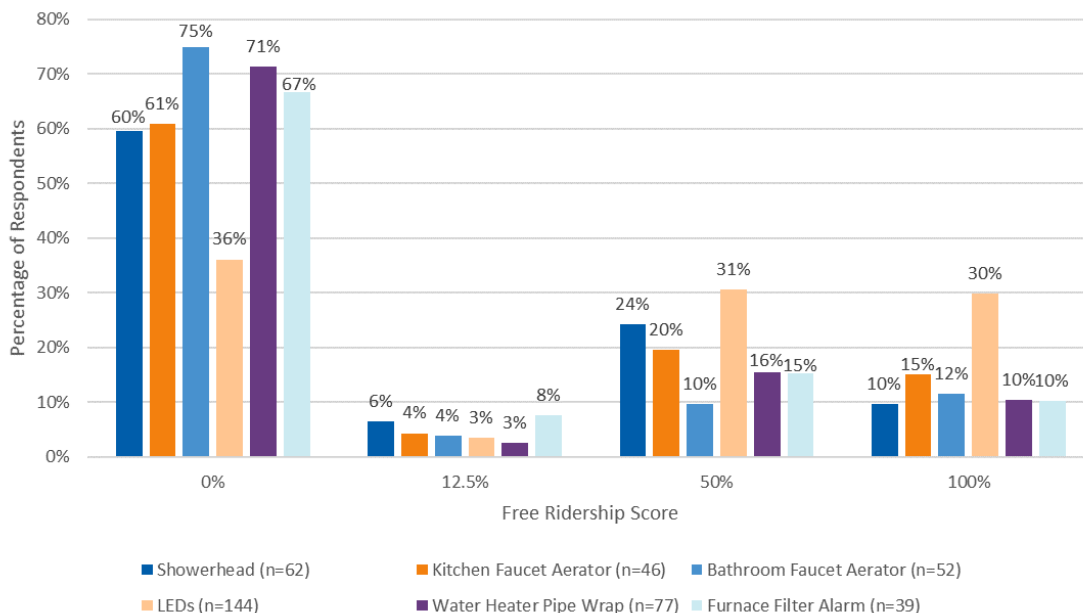
## Distribution of School Kit Free Ridership Scores

Figure 1 shows the distribution of assigned free ridership scores by program measures. Of all kit measures, the bathroom faucet aerator had the highest percentage (75%) of respondents estimated as 0% free riders. The showerhead measure also had the lowest percentage (9.7%) of respondents estimated as 100% free riders. LEDs had the lowest percentage (36%) of respondents estimated as 0% free riders and the highest percentage (30%) of respondents estimated as 100% free riders.

<sup>5</sup> This is consistent with the State and Local Energy Efficiency Action Network’s Energy Efficiency Program Impact Evaluation Guide, dated December 2012 which states that “A participant is a total free rider if he or she would have absolutely installed the same project at the exact same time, at the same price, even if the program did not exist – and they know that”. Accordingly, someone that “doesn’t know” is not a total free rider.



**Figure 1. Overall Distribution of School Kit Free Ridership Scores by Measure**



## Multifamily Kit Free Ridership Results

The multifamily kits delivery channel participant free ridership and participant spillover ratios were estimated from an interview conducted with a corporate level project manager who supervised the installation of energy-efficient kit measures in the only three properties participating in the program.

In absence of the multifamily kits delivery channel, the property manager reported that they would have purchased and installed the same type and number of each energy efficiency item in the same number of units at the properties but they would have completed the purchase and installations more than two years out from their initial participation date.

Free ridership is estimated at 0% for the multifamily kits delivery channel because the property manager would not have purchased the energy-efficient multifamily kit items within two years of their original program participation date.

## Participant Spillover Results

Cadmus asked school kit delivery channel participants whether they took additional energy-efficient actions since participating in the program. To calculate spillover, the team asked them to rate the importance of the following factors on their decisions to purchase additional energy-efficient equipment:

1. Receiving kit measures through Ameren Missouri’s Energy Efficiency Kits program
2. Information provided from Ameren Missouri or its Heating and Cooling contractor about the benefits of installing the additional equipment

Survey respondents reported installing 30 additional energy-efficient measures after participating in the Energy Efficiency Kits program, and said their program experience was *very important* to the subsequent decision to purchase a high-efficiency appliance rather than a standard-efficiency model.

The team estimated energy savings for the participants' spillover responses, and then divided the total survey sample Energy Efficiency Kits program survey sample spillover savings by the survey sample gross program savings, drawn from the survey sample and described in the following equation:

$$Spillover \% = \frac{\sum[Spillover kWh savings for all survey respondents]}{\sum[Program kWh savings for all survey respondents]}$$

Table 39 presents a summary of the spillover details.

**Table 39. School Kits Participant Spillover**

Spillover Measure	Quantity	Participant Spillover kWh/year Savings*	Total Survey Sample Program kWh/year Savings
Efficient Central Air Conditioner	1	319.7*	319.7
Efficient Clothes Washer—Electric Water Heat	1	60.0**	60.0
Efficient Clothes Washer—Gas Water Heat	5	17.2***	86.0
Efficient Faucet Aerator - Kitchen	1	248.6†	248.6
Efficient Faucet Aerator - Bathroom	3	40.5†	121.5
Efficient Refrigerator	4	18.5††	74.0
Efficient Room Air Purifier	1	577.8†††	577.8
Efficient Showerhead	2	338.4†	676.8
Efficient Windows	3	186.9^	560.7
Heat Pump Water Heater	1	3,073.8†††	3,073.8
Recycled A Refrigerator	3	247.2^^	741.6
Smart Thermostat	5	385.7†††	1,928.7
<b>Program Total</b>			<b>8,469.2</b>

\* Based on savings calculated for the PY17 Heating and Cooling program.

\*\*Deemed savings for gas water heating and unknown dryer fuel, from the Illinois TRM Version 5.0 Volume 3. Reduced by one half due to high market shares of ENERGY STAR clothes washers.

\*\*\*Deemed savings for electric water heating and unknown dryer fuel, from the Illinois TRM Version 5.0 Volume3. Reduced by one half due to high market shares of ENERGY STAR clothes washers.

† Based on savings calculated for the PY17 Energy Efficiency Kits program.

††Deemed savings for ENERGY STAR Refrigerator from the Illinois TRM Version 5.0 Volume 3. Reduced by one half due to high market shares of ENERGY STAR refrigerators.

†††Based on savings calculated for the PY17 Efficient Products program.

^Based on savings calculated for the PY15 Home Energy Analysis program.

^^Based on one-half savings calculated for PY15 Refrigerator Recycling program to account for uncertainty on whether the refrigerator was resold.

The results yielded a 23% spillover estimate for the PY17 school kits delivery channel, as show in Table 40.

**Table 40. School Kits Participant Spillover Percentage**

Survey Sample Spillover kWh Savings	Survey Sample Gross Program kWh Savings	Spillover %
8,469	36,909	23%

The multifamily kits delivery channel property manager that was interviewed did not report undertaking installations of additional energy efficiency measures or perform energy-efficient activities without receiving financial assistance due to their experience participating in the program. The multifamily kit delivery channel participant spillover is estimated at 0%.

### *Nonparticipant Spillover*

Effective program marketing and outreach generates program participation *and* increases general energy efficiency awareness among customers. Sustained utility program and general marketing can affect customers’ perceptions of their energy usage, and, in some cases, motivate them to take efficiency actions outside of the utility’s program. The energy savings caused by—but not rebated through—a utility’s demand-side management activities are referred to as nonparticipant spillover (NPSO).

During PY17, Ameren Missouri spent \$344,759 to market individual residential efficiency programs (excluding Low Income and Home Energy Report).<sup>6</sup> To understand whether Ameren Missouri’s program-specific marketing efforts generated energy efficiency improvements outside of the incentive programs, Cadmus implemented a large online survey of PY17 nonparticipating residential customers. While this survey has been implemented annually since PY13, the PY17 version garnered the greatest number of respondents. Moreover, the PY17 version updated the questions asking why respondents took efficiency actions to include several predefined responses for respondents to select, such as “to save money,” or “like the style.” Compared with the PY16 version, which asked respondents to provide open-ended responses, the PY17 version reduces uncertainty around the interpretation of responses.

## Methodology

### *Survey Sampling and Disposition*

As a departure from the phone surveys conducted during previous program years, Cadmus and Ameren Missouri agreed to administer an online survey to most efficiently increase the number of survey completes. Sample design relied on analysis of the PY16 survey results to determine the sample size necessary to achieve 90/10 confidence/precision in PY17.

Out of 198 survey respondents in PY16, six (or 3%) reported like measures that qualified for NPSO. Based on this result, Cadmus estimated that 3% of all nonparticipants in the population adopted like measures with ±2% absolute precision at 90% confidence. We also analyzed confidence/precision around NPSO savings for each type of like measure. Individual measures’ absolute precision values

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<sup>6</sup> The Home Energy Report program is evaluated using billing analysis, which accounts for both program savings and spillover savings. Thus, it is excluded from this NPSO analysis.

varied from  $\pm 31\%$  to  $\pm 41\%$ . Based on stakeholders' desire for higher precision at the measure level for nonparticipant spillover, Cadmus estimated a sample size of approximately 2,244 needed to achieve more-reliable precision values for NPSO overall and, to the extent predictable, for individual measures. It is hard to determine precision predictions for individual measures before conducting the survey.

From Ameren Missouri's entire residential customer base, Cadmus selected customers who did not participate in any Ameren Missouri programs in PY17 (including the Home Energy Report program); these 731,725 customers served as the nonparticipant survey population.<sup>7</sup> From this population, the evaluation team randomly selected 62,500 customers for the sample, assuming a conservative response rate (about 4%) would achieve the quota of completes. The team mailed postcard invitations, asking customers to enter a web address that would take them to the online survey administered through Qualtrics (an online survey software vendor). To thank customers for completing the survey, the team entered them into a drawing for one of five \$100 Visa gift cards. If customers expressed interest in completing the survey but did not have access to a computer linked with the Internet, the team arranged for them to complete the survey over the phone with a Cadmus employee. Within a three-week fielding period, Cadmus achieved the target quota with 2,373 online and 58 phone completes.<sup>8</sup>

### *Like NPSO Measures*

The survey asked respondents if they adopted any of 13 energy efficiency measures offered through Ameren Missouri programs (i.e., the "like" measures shown in Table 41). We excluded all products in the Lighting program and most products in the Heating and Cooling program to avoid double-counting NPSO savings captured through those programs' like NPSO analyses (described in those programs' reports).

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<sup>7</sup> Cadmus removed invalid or duplicate phone numbers from the sample frame as well as Home Energy Report participants.

<sup>8</sup> About 7% of respondents completing the survey (n=187) self-reported that they participated in an Ameren Missouri program in PY17; so were not counted as part of the 2,431 nonparticipant completes.

**Table 41. PY17 Like Measures**

Like Measure
Room Air Conditioner
Room Air Purifier
Pool Pump
Showerhead
Kitchen Faucet Aerator
Bathroom Faucet Aerator
Hot Water Pipe Insulation for your Hot Water Heater
Furnace Fan with ECM (Electronically Commutated Motor)
Filter Whistle
Heat Pump Water Heater
Learning or “Smart” Thermostat
Air Conditioner Tune Up
Heat Pump Tune Up

Customers also could adopt energy efficiency measures or perform energy-saving actions outside of Ameren Missouri’s PY17 program offerings (i.e., “non-like” NPSO). These were not considered as part of the NPSO estimate.<sup>9</sup>

***NPSO Qualification Criteria***

To confirm a relationship between Ameren Missouri’s energy efficiency programs and measures adopted by nonparticipants, Cadmus created a set of selection criteria and operationalized these into survey questions. To qualify for NPSO savings, respondents had to meet all following criteria (see Appendix H for the NPSO qualification flow charts):

- a) Familiarity with at least one Ameren Missouri program, rebate, or discount.
- b) At least one element of Ameren Missouri’s program marketing and outreach motivated them to adopt the measure.
- c) They had a valid reason for considering the adopted measure energy efficient.
- d) They had not received a rebate from Ameren Missouri, had not tried to receive a rebate from Ameren Missouri, and stated a valid reason for not applying for an Ameren Missouri measure rebate.
- e) They had a valid reason for deciding to install the measure.
- f) The adopted measure generated electric savings, not gas savings.

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<sup>9</sup> In PY16, the team estimated that non-like NPSO savings equated to 15.1% of the total portfolio evaluated savings. However, in subsequent discussions with stakeholders, Ameren Missouri agreed not to count these savings toward overall spillover estimates in PY17 or future years.

For criterion a, respondents had to have seen or heard of Ameren Missouri’s energy efficiency programs, or be aware that Ameren Missouri offered rebates and discounts for energy-saving equipment in customers’ homes.

For criterion b, the team asked respondents to rate the importance of several Ameren Missouri program marketing and outreach elements (shown in Table 42) in motivating them to adopt the spillover measure, rating these “very important,” “important,” “not important,” or “not important at all.” For like measures, the measure in question met criterion b if the respondent found at least one element “very important” or “important” in deciding to adopt the measure.

**Table 42. Ameren Missouri Marketing and Outreach Elements for Criterion B**

Statement
Information about energy savings from Ameren Missouri’s marketing or bill-inserts
Ameren Missouri’s marketing information from a contractor or retailer
Information from colleagues or friends who installed energy-efficient equipment and received a rebate from Ameren Missouri
If applicable, past participation in an Ameren Missouri rebate program
If applicable, information from a home energy assessment conducted through Ameren Missouri

Criterion c helped ensure that like measures actually generated energy savings. For all measures except air conditioning and heat pump tune ups, the team asked respondents how they knew their product was energy efficient. Responses passing criterion c included: “It’s ENERGY STAR rated” or “the retailer/dealer/contractor told me it was.” Responses such as “common sense” or “my son” did not pass the criterion.

The team asked whether respondents received a rebate from Ameren Missouri (to double-check that respondents truly did not participate in the program). The team then asked why respondents or their contractor did not apply for a rebate through Ameren Missouri. If respondents reported that they applied for a rebate but did not receive it or that their product or tune up did not qualify, their adopted measure did not pass criterion d. Responses such as “was not aware of rebate” or “Just forgot about it” passed the criterion.

For criterion e, the team asked respondents why they decided to adopt the measure. If the response did not relate to saving energy or saving money, the measure did not pass criterion e. For example, one respondent reported installing a “learning or ‘smart’ thermostat” because it was a “cool gadget.” As this response did not relate to energy efficiency, the measure did not qualify as NPSO.

As the PY17 evaluation covered only electric savings generated by Ameren Missouri’s programs, the team asked respondents for their water heater and heating system fuel types. Reported like measures with water heating and heating end uses satisfied criterion f if the measures had a corresponding electric water heater or electric heat.

## Results

Of 2,431 verified nonparticipant respondents, 77 respondents adopted a total of 109 like measures that were not incentivized and passed all six NPSO criteria (see Appendix H. Nonparticipant Spillover Survey Data). None of these 77 respondents received an incentive from Ameren Missouri for any measure. They were influenced by Ameren Missouri program marketing and outreach, and adopted NPSO measures on their own.

### Like NPSO Measures

Table 43 shows like measures and gross evaluated kWh savings attributed to Ameren Missouri, achieving average savings of 189 kWh per like measure (Variable A).

**Table 43. PY17 Like NPSO Response Summary**

Individual Reported Like Measures	Importance of Ameren Missouri Influence on Adoption	Measure Savings (kWh)*	Allocated Savings	Quantity	Total Allocated kWh Savings	Avg kWh Per Spillover Measure
Heat pump water heater	Somewhat	2,526	50%	1	1,263	Variable A
Hot water pipe insulation for your hot water heater	Very	3	100%	19	48	
Hot water pipe insulation for your hot water heater	Somewhat	3	50%	12	15	
Kitchen faucet aerator	Very	41	100%	4	163	
Kitchen faucet aerator	Somewhat	41	50%	1	20	
Pool pump	Very	1,800	100%	1	1,800	
Room air conditioner	Very	50	100%	1	50	
Room air conditioner	Somewhat	50	50%	1	25	
Room air purifier	Very	578	100%	2	1,156	
Showerhead	Very	59	100%	3	178	
Showerhead	Somewhat	59	50%	1	30	
Air conditioner Tune Up	Very	318	100%	36	11,440	
Air conditioner Tune Up	Somewhat	318	50%	26	4,131	
Heat pump Tune Up	Very	318	100%	1	318	
<b>Total (n=109)</b>					<b>20,637</b>	

\*Based on savings calculated for PY17 programs.

### Like NPSO Confidence Precision Analysis

As shown in Table 44, the absolute precision—with 90% confidence—for each of nine qualified like measure types was within  $\pm 10\%$ . For some measure types where the percentage of respondents adopting the measure was 3% or less, Cadmus could not accurately estimate the incidence of these measures within the population. However, we are confident with the proportion of nonparticipants reporting some type of like measure (3% or 77/2,431), which has an absolute precision of  $\pm 0.58\%$  with 90% confidence.

**Table 44. PY17 Confidence/Precision Results for Like Measures**

Like Measure	Number of respondents	Percentage of respondents	Absolute Precision with 90% confidence
Heat pump water heater	1	1%	2%
Hot water pipe insulation for your hot water heater	6	8%	5%
Kitchen faucet aerator	5	6%	5%
Pool pump	1	1%	2%
Room air conditioner	2	3%	3%
Room air purifier	2	3%	3%
Showerhead	3	4%	4%
Air conditioner Tune Up	62	81%	8%
Heat pump Tune Up	1	1%	2%
<b>Total of Respondents Who Reported like Measures</b>	<b>77</b>	<b>3%*</b>	<b>0.58%</b>

\*Note that 3% is the proportion of all survey respondents (n = 2,431) who reported like measures, whereas the Proportions for the measure types are out of the respondents who reported like measures (n = 77).

### *Like NPSO Extrapolation to Nonparticipant Population*

To determine total like NPSO generated by Ameren Missouri’s marketing in PY17, Cadmus extrapolated like NPSO savings per like measure (Table 43) to the entire PY17 residential nonparticipant population. Table 45 presents the like NPSO analysis, resulting in like NPSO total evaluated savings of 6,212 MWh portfolio level.

**Table 45. PY17 Like NPSO Analysis**

Variable	Metric	Value	Source
A	Average kWh Savings per Like Measure	189	Survey Data; PY17 Impact Evaluation
B	Number of Like Measures	109	Survey Data
C	Number of Nonparticipant Respondents	2,431	Survey Disposition
D	Total Residential Population Minus PY17Participants	731,725	Customer Database
E	Total Like NPSO MWh Savings Applied to Population	6,212	$((B \div C) \times A) \times D / 1000$

Like NPSO savings in PY17 (6,212 MWh) are greater than savings reported in PY16 (5,050 MWh). This is due to two direct factors: the average kWh savings per like measure increased from 176 kWh in PY16 to 189 kWh in PY17, and the average like measure per nonparticipant increased from 0.035 in PY16 to 0.045 in PY17.

### *Spillover Allocation to Individual Programs*

The observed 6,212 MWh of like NPSO equates to 7.6% of the total portfolio evaluated savings. As in previous years, the team allocated the NPSO based on marketing budget and savings for each program. This approach remained consistent with the theory that NPSO resulted from the cumulative effects of program-specific marketing and program activity over a period—not necessarily by a single, program-specific marketing effort. In addition, while NPSO was most commonly associated with mass media marketing campaigns, the scale of program activity also counted as a factor.



For example, even without a significant marketing campaign, a program’s size can drive NPSO through word-of-mouth and in-store program messaging. The team found this approach accurately reflected and attributed NSPO to programs, ensuring those total costs (including marketing) and total benefits (net savings including NPSO) were properly accounted for when assessing overall program cost-effectiveness.

Other alternatives for allocating the observed like NPSO to individual programs included the following:

- **Even Allocation:** The most straightforward approach allocated NPSO evenly across the residential programs (i.e., made a 7.6% adjustment to each program’s NTG). This equaled applying NPSO at the portfolio-level, and, therefore, assumed all programs contributed equally to generating NPSO.
- **“Like” Programs:** Another approach allocated NSPO savings to specific programs, based on the measure that the nonparticipant respondent installed. For example, if a respondent reported installing a smart thermostat, motivated by Ameren Missouri’s marketing. Using this approach, the team assigned NPSO savings associated with the installation to the Efficient Products program.

While this approach established a clear connection between a reported spillover measure and Ameren Missouri’s program (which promoted that measure), the research found this direct measure-program relationship did not prove as straightforward as it appeared. For example, although all 20 respondents reporting like NPSO equipment measures knew of Ameren Missouri programs, only a fifth of them were familiar with the specific program corresponding to the measure they installed.<sup>10</sup> This indicated that Ameren Missouri generated NPSO through the cumulative effects of various program-specific marketing efforts, and mapping spillover measures solely to the program offering the specific measure could undervalue the overall impact of cumulative and sustained energy efficiency messaging.

The allocation approach is based on the combined savings and marketing budget and illustrated in Table 46.

**Table 46. PY17 Combined Savings and Marketing Allocation**

Program	Program Ex Post Gross Savings (MWh)	Percentage of Portfolio Savings	Program Marketing	Percentage of Total Marketing	Combined Savings & Marketing (AxB)	Percentage of Combined Savings & Marketing
Lighting	22,733	27.7%	\$33,729	9.8%	2.7%	6.9%
Efficient Products	4,732	5.8%	\$50,634	14.7%	0.8%	2.2%
Heating and Cooling	44,089	53.7%	\$225,424	65.4%	35.1%	89.3%
Smart Thermostats	5,224	6.4%	\$27,564	8.0%	0.5%	1.3%
EE Kits	5,367	6.5%	\$7,408	2.1%	0.1%	0.4%
<b>Total</b>	<b>82,144</b>	<b>100%</b>	<b>\$344,759</b>	<b>100%</b>	<b>39%</b>	<b>100%</b>

<sup>10</sup> C5 “Are you familiar with the following programs?”

Using the allocation method based on marketing budget and program size, the team distributed the portfolio-level result of 6,212 MWh NPSO to each of Ameren Missouri’s residential programs. As shown in Table 47, the results of this approach reflected each program’s impact on the nonparticipant population, proxied by the combined effect of marketing expenditures and program savings. The Energy Efficiency Kits program achieved 0.4% of the total NPSO, at 22 MWh.

**Table 47. PY17 NPSO by Program**

Program	Program Gross Savings (MWh)	Total NPSO (MWh)	Percentage of Combined Savings/ Marketing	Program-Specific NPSO (MWh)
Lighting	22,733	6,212	6.9%	428
Efficient Products	4,732		2.2%	134
Heating and Cooling	44,089		89.3%	5,547
Smart Thermostats	5,224		1.3%	80
EE Kits	5,367		0.4%	22
<b>Total</b>	<b>82,144</b>			<b>100%</b>

## Benchmarking

As part of the 2016 process evaluation, Cadmus researched eight other utilities that offered measures similar to those in Ameren Missouri's Energy Efficiency Kits Program. The team conducted secondary research using its benchmarking database, E-Source, and publicly available information to identify programs with the most recent evaluations available and to contain information regarding metrics and topics planned for benchmarking. For the 2017 report, we have updated Ameren Missouri's metrics to reflect changes to program impacts.

### *Benchmarking Metrics and Topics*

For the multifamily and school-based delivery channels, benchmarking research compared the following:

- Kit contents
- Measure installation rates
- Program participation
- *Ex post* per-kit savings (kWh)
- *Ex post* per-kit savings (kW)

### *School Kit Contents and Installation Rates*

In comparing similar school kit programs to the school-based delivery channel of Ameren Missouri's Energy Efficiency Kits Program, Cadmus sought to establish whether grade levels targeted and measures implemented for Ameren Missouri could be considered standard practice, or if other measures could be considered.

The comparison programs all offered free energy-efficient products to students and their families, though they targeted varied grade levels. Benchmarked school kit programs most commonly targeted the fifth-grade level. All benchmarked kit programs offered kits to fifth graders, while PNM and IMP targeted fifth grade only, and Vectren Indiana targeted fourth- and fifth-grade levels.

On the other hand, Dayton Power and Light (DP&L) and PPL Electric targeted a more comprehensive range of students, with DP&L distributing kits to grades five to 12 and PPL Electric offering kits to grades two to 12.

As shown in Table 48, all programs offered showerheads, aerators, and LED or CFL light bulbs to students and their families. Compared to other school kit programs, Ameren Missouri's channel contained all the most common measures (e.g., light bulbs, showerheads, aerators, a filter alarm), other than an LED night light (which five other benchmarked programs offered). Only one program offered an energy-efficient power strip (PPL Electric) (and only to secondary school students).

**Table 48. Common School Kit Products**

Utility	LED Light Bulbs	CFL Light Bulbs	Night Light	Showerhead	Aerators*	Power Strip	Furnace Whistle
Ameren Missouri	✓			✓	✓		✓
Public Service Co. of New Mexico		✓	✓	✓	✓		
Indiana Michigan Power	✓	✓	✓	✓	✓		✓
PPL	✓		✓	✓	✓	✓	✓
Vectren Indiana		✓	✓	✓	✓		Discontinued
Dayton Power & Light		✓	✓	✓	✓		✓

\*All school kit programs offered kitchen and bath aerators except for IMP, which only offered kitchen aerators.

Table 49 compares Ameren Missouri’s school kit installation rates with results from similar programs. Lighting measures tended to have the highest installation rates, a result typical of school kit programs. The table presents some installation rates as a range, depending on the bulb wattage for LED and CFL light bulbs or the age group targeted. When compared other utility programs, Ameren Missouri school kits had the highest installation rates for bathroom aerators and some of the higher installation rates for LED light bulbs in PY17.

**Table 49. Common School Kit Product Initial Installation Rates**

Utility	LED Light Bulbs	CFL Light Bulbs	Night Light	Shower-head	Kitchen Aerator	Bathroom Aerator	Power Strip	Furnace Whistle
Ameren Missouri (PY17)	87%	Not Offered	Not Offered	57%	53%	56%	Not Offered	45%
Ameren Missouri (PY16)	92%	Not Offered	Not Offered	65%	53%	57%	Not Offered	47%
Public Service Co. of New Mexico <sup>1</sup>	Not Offered	65%	Not Offered	N/A	47%	44%	Not Offered	Not Offered
	Not Offered	72%	Not Offered	N/A	54%	51%	Not Offered	Not Offered
Indiana Michigan Power (IMP) <sup>2</sup>	64%	80-87%	94%	74%	59%	Not Offered	Not Offered	60%
PPL Electric <sup>3</sup>	89-90%	Not Offered	73-86%	25-31%	32%	27%	74%	13%
Vectren Indiana <sup>2</sup>	Not Offered	63-70%	86%	52%	47%	47%	Not Offered	Not Offered
Dayton Power & Light	Not Offered	86%	39%	63%	43%	42%	Not Offered	N/A

<sup>1</sup>Public Service Company of New Mexico measured installation rates for spring and fall customers. Spring installation rates are shown in the top row, and fall installation rates are shown below.

<sup>2</sup>For IMP and Vectren Indiana, the CFL light bulb installation rate is presented as a range as they offer 23- and 13-watt bulbs, and measured installation rates for those separately.

<sup>3</sup>For PPL Electric, LEDs, CFLs, night lights, and showerheads were offered to different age groups, and installation rates measured for those age groups separately.

## School Kit Program Participation and Per-Kit Savings

For the school-based delivery channel, Cadmus compared Ameren Missouri to five other utility programs. Table 50 compares program participation and per-kit savings to Ameren Missouri’s school kits, with the results reported for other, similar programs. Of five benchmarked school kit programs, Ameren Missouri’s school-based delivery channel sent out one of the greatest number of school kits, and its savings per kit were slightly higher than the other programs.

**Table 50. School-Based Delivery Channel Benchmarking Results: Participation and Per-Kit Savings**

Utility	Program	Total Kits Distributed	Ex Post Gross Savings (kWh/yr)	Ex Post Per Kit Savings	Ex Post Gross Savings (kW/yr)	Ex Post Per Kit Savings
Ameren Missouri (PY17)	PY17 Energy Efficiency Kits Program (School Kits)	16,117	4,673,315	290	913.8	0.06
Ameren Missouri (PY16)	PY16 Energy Efficiency Kits Program (School Kits)	16,245	4,765,843	293	714.2	0.04
Dayton Power and Light	2015 Residential Energy Education (Be E3 Smart) Program	9,298	4,162,367	448	281	0.03
Indiana Michigan Power	2015 School Energy Education Program	11,744	4,571,388	389	811	0.07
PPL Electric	2015-2016 Student & Parent Energy-Efficiency Education Program	25,085	4,053,000	162	428	0.02
Public Service Co. of New Mexico	2014 Student Efficiency Kits Program	3,578	437,753	122	22	0.01
Vectren Indiana	2015 Energy Efficient Schools Program	2,600	920,270	354	58	0.02

## Multifamily Kit Contents

The Team compared the multifamily kit delivery channel to multifamily direct-install programs to establish whether kit contents represented standard practice or if other measures could be considered. The comparison programs all offered free products to multifamily households, but all programs—other than Ameren Missouri’s multifamily kits delivery channel—worked as direct-install programs (rather than property manager install kit programs). As shown in Table 51, all programs offered CFL light bulbs, showerheads, and kitchen and bathroom aerators to multifamily units.

**Table 51. Common Multifamily Kit Products**

Utility	LED Light Bulbs	CFL Light Bulbs	Shower-head	Kitchen Aerator	Bath Aerator	Pipe Wrap
Ameren Missouri	✓		✓	✓	✓	✓
Entergy Arkansas		✓	✓	✓	✓	
Indianapolis Power and Light		✓	✓	✓	✓	✓
Wisconsin Focus on Energy	✓	✓	✓	✓	✓	✓
Vectren Indiana		✓	✓	✓	✓	✓

Compared to other multifamily direct-install programs, Ameren Missouri’s multifamily kit delivery channel contained most of the common measures provided by utilities, along with measures not typically offered by other programs (e.g., LED light bulbs, pipe wrap). Not shown in Table 51 is one program offering a thermostat (i.e., Indianapolis Power and Light), and another, Entergy Arkansas, that offers advanced power strips and AC tune ups.

Table 52 compares Ameren Missouri’s multifamily kit installation rates with results from similar programs. The table presents some installation rates as a range, depending on the bulb wattage for LED and CFL light bulbs or the age group targeted.

**Table 52. Common Multifamily Kit Product Installation Rates**

Utility	LED Light Bulbs	CFL Light Bulbs	Shower-head	Kitchen Aerator	Bathroom Aerator	Pipe Wrap
Ameren Missouri (PY17)	100%	100%	100%	100%	100%	100%
Ameren Missouri (PY16)	100%	100%	100%	100%	100%	100%
Entergy Arkansas <sup>1</sup>	Not Offered	100%	100%	100%	100%	Not Offered
Indianapolis Power and Light	Not Offered	76-91%	75%	80%	91%	100%
Wisconsin Focus on Energy	97%	97%	97%	97%	97%	97%
Vectren Indiana (2014)	Not Offered	94%	92%	86%	93%	100%

<sup>1</sup>Product installation rates are assumed to be 100% since savings were claimed for all reported measures.

Cadmus compared program participation of Ameren Missouri’s multifamily kit delivery channel, with the results reported for four other programs. Due to the unique delivery of Ameren Missouri’s multifamily kits, the team could not find programs that directly offered kit programs for property owners and managers to install; consequently, the team benchmarked against direct-install multifamily kits. As shown in Table 53 Ameren Missouri’s multifamily kit delivery channel distributed the least number of kits of all benchmarked utilities.

**Table 53. Multifamily Kit Delivery Channel Benchmarking Results: Participation and Per-Kit Savings**

Utility	Program	Total Kits Distributed	Ex Post Gross Savings (MWh/yr)	Ex Post Per Kit Savings	Ex Post Gross Savings (kW/yr)	Ex Post Per Kit Savings
Ameren Missouri	PY17 Energy Efficiency Kits Program (Multifamily Kits)	862	693,507	804.5	130	0.15
Ameren Missouri	PY16 Energy Efficiency Kits Program (Multifamily Kits)	82	35,397	431.7	3.9	0.05
Entergy Arkansas	2015 Multifamily Homes Program	2,092	1,368,124	654	200	1.0
Indianapolis Power & Light	2015 Residential Multifamily Direct Install Program	7,701	4,114,637	534	554	0.07
Wisconsin Focus on Energy	2015 Multifamily Direct Install Program	5,016	3,119,305	622	200	0.04
Vectren Indiana	2014 Multifamily Direct Install Program	1,035	746,851	721.6	87	0.08

## Key Progress Indicators

Cadmus tracks the following key progress indicators for the Energy Efficiency Kits program:

- Program year electric savings
- Total number of kits distributed
- Changes to energy efficiency kit contents
- Recipient’s satisfaction with energy efficiency kits and with Ameren Missouri

Table 54 and Table 55 show the team’s key metrics. In the PY17 evaluation, the team compared these key progress indicators to new results and reported findings.

**Table 54. Energy Efficiency School Kits Key Progress Indicators**

Key Metric	PY16 School	PY17 School
Electric savings	4,765.8 MWh	4,288.5 MWh
Total Number of Kits Distributed	16,245	16,117
Changes to Energy Efficiency Kit Contents from previous program year	N/A	none
Percentage that agree with the statement, “I am satisfied with my child’s experience in the Ameren Missouri Energy Efficiency Kits School Program”	99% satisfied (n=400)	98% satisfied (n=296)
Satisfaction with Ameren Missouri	79% satisfied (n=376)	94% satisfied (n=209)

**Table 55. Energy Efficiency Multifamily Kits Key Progress Indicators**

Key Metric	PY16 Multifamily	PY17 Multifamily
Electric savings	35.4 MWh	693.5 MWh
Total Number of Kits Distributed	82	862
Changes to Energy Efficiency Kit Contents from previous program year	Removed CFLs from kit	Added 2 LED bulbs
Percentage that agree with the statement, “I am satisfied with my child’s experience in the Ameren Missouri Energy Efficiency Kits School Program”	N/A	100%
Satisfaction with Ameren Missouri	N/A	100%



## Cost-Effectiveness

Ameren Missouri assessed cost-effectiveness using the following five tests, as defined by the California Standard Practice Manual:<sup>11</sup>

- Total Resource Cost (TRC) Test
- Utility Cost Test (UCT)
- Ratepayer Impact Measure Test (RIM)
- Participant Test (PART)
- Societal Cost Test (SCT)

DSMore takes hourly prices and hourly energy savings from specific measures installed through the Efficient Products program, and correlates prices and savings to 33 years of historic weather data. Using long-term weather ensures that the model captures low-probability, high-consequence weather events, and appropriately values these. As a result, the model produces an accurate evaluation of the demand-side efficiency measure relative to other alternative supply options.

Key assumptions include the following:

- Discount Rate = 6.46%
- Line Losses = 5.72%
- Summer Peak would occur during the 16<sup>th</sup> hour of a July weekday, on average
- Avoided Electric costs from the 2014 Integrated Resource Plan (IRP) filing were used for measures delivered between March 1, 2017 and September 28, 2017. Avoided costs from the 2017 IRP that was filed October 1, 2017 were used for all measures delivered on or after October 1, 2017
- Escalation rates for different costs occur at the component level, with separate escalation rates for fuel, capacity, generation, T&D, and customer rates carried out over 25 years

Ameren Missouri used evaluation results as model inputs (e.g., PY17-specific Energy Efficiency Kits program participation counts, per-unit gross savings, NTG, NPSO).

Particularly, measure load shapes drove model assumptions, as indicated when the model should apply savings during the day. This ensured that the load shape for an end use matched the system peak impacts of that end use, and provided the correct summer coincident savings. Ameren Missouri used measure lifetime assumptions and incremental costs based on the program database, the Ameren Missouri TRM, or the original Batch Tool.

A key step in the analysis process required PY17 Ameren Missouri program-spending data: actual spending, broken down into contractor administration, incentives, and marketing costs. Ameren

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<sup>11</sup> California Standard Practice Manual: Economic Analysis of Demand-Side Programs and Projects. October 2001.

Missouri applied these costs at the program level. Other costs—including R&D, EM&V, Educational Outreach, Portfolio Administration, Potential Study, and Data Tracking—were allocated to programs based upon program benefits. DSMore reports results in 2016 dollars and any inputs and outputs reported by DSMore are discounted from the 2017 spending inputs.

Table 56 summarizes cost-effectiveness findings by test. Any benefit-cost score above 1.0 passed the test as cost-effective. As shown, the Energy Efficiency Kits program passed the UCT, TRC, Societal, and PART tests.

**Table 56. Cost-Effectiveness Results (PY17)**

Program	UCT	TRC	RIM	SCT	PART
Energy Efficiency Kits	3.65	9.27	0.43	12.26	NA

# Appendix A. End Use Load Shapes and Coincidence Factors

Appendix E

End-Use Category Energy Load Shapes  
% Energy by Month

Month	Residential End-Use Category Load Shape								
	Building Shell	Cooling	Freezer	HVAC	Lighting	Miscellaneous	Pool Spa	Refrigeration	Water Heating
January	11.1297%	0.1200%	7.9579%	11.1297%	10.1182%	8.4893%	8.6451%	7.7053%	10.3527%
February	9.3077%	0.1100%	7.2518%	9.3077%	8.8441%	7.7366%	7.1145%	7.2169%	9.0720%
March	7.0042%	0.3130%	8.1080%	7.0042%	9.2879%	8.4863%	8.6052%	8.0272%	9.5543%
April	3.7116%	1.5047%	7.9918%	3.7116%	8.4645%	8.2144%	8.0702%	7.8752%	8.4799%
May	4.0888%	6.5410%	8.4083%	4.0888%	7.9393%	8.4847%	8.6052%	8.5646%	8.3600%
June	10.3973%	21.0823%	8.5730%	10.3973%	6.8508%	8.2122%	8.0702%	8.9112%	7.7065%
July	14.0100%	28.4780%	9.6095%	14.0100%	6.7864%	8.4883%	8.6451%	9.4239%	6.7712%
August	13.3207%	27.0766%	9.6095%	13.3207%	7.0565%	8.4840%	8.5653%	9.4212%	6.3688%
September	6.6759%	12.6605%	8.4277%	6.6759%	7.3792%	8.2136%	8.3032%	8.4971%	6.9373%
October	3.7011%	1.8472%	8.2582%	3.7011%	8.4539%	8.4869%	8.6052%	8.5653%	7.9644%
November	5.9593%	0.1444%	7.8465%	5.9593%	8.9880%	8.2122%	8.1088%	7.8717%	8.4752%
December	10.6937%	0.1222%	7.9579%	10.6937%	9.8312%	8.4915%	8.6619%	7.9204%	9.9577%

End-Use Category Energy to Coincident Peak Demand Factors

	Building Shell	Cooling	Freezer	HVAC	Lighting	Miscellaneous	Pool Spa	Refrigeration	Water Heating
	0.0004660805	0.0009474181	0.0001685722	0.0004660805	0.0001492529	0.0001148238	0.0002354459	0.0001285253	0.0000887318

Source: Ameren Missouri 2016-2018 Energy Efficiency Plan. MPSC file number EO-2015-0055  
Appendix E to evaluated energy savings.

## Appendix B. School Kit Survey Responses

Table 57 shows the most frequent answers to each demographic question asked in the student family participant survey.

**Table 57. Demographics**

Demographic	Most Frequent Answer	Percentage
Is Ameren Missouri your electricity provider?	Yes	90%, n=266
How many people live in your house?	Four	43%, n=205
Primary heating fuel	Natural Gas	58%, n=207
Water heating fuel*	Natural Gas	62%, n=205
How many showers are in your home?	Two	50%, n=208
How many kitchen faucets are in your home?	One	88%, n=208
How many bathroom faucets are in your home?	Three or more	54%, n=206

\*40% of the respondents answered that their water is heated with electricity (n=386).

This appendix provides the responses to questions in the Energy Efficiency Kits Program, school kits survey. The tables below provide the number of responses to the answers for each closed-ended survey question. They also provide the percentage of customers that selected each response, excluding those that answered, “don’t know” or “not applicable”. Note: these frequencies are not weighted to account for survey mode.

### B. Satisfaction with Program and Kit Items

**Table 58. Survey Question B1 Responses (n=294)**

For the following statement, check the box that corresponds with whether you strongly agree, somewhat agree, agree, somewhat disagree, or strongly disagree with the following statement: “I am satisfied with my child’s experience in the Ameren Missouri Energy Efficiency Kits School Program.”		
Response	Count of Response	Percent of Respondents
Strongly agree	206	70%
Somewhat agree	34	12%
Agree	51	17%
Somewhat disagree	2	1%
Strongly disagree	1	0%
Don't know	2	

**Table 59. Survey Question B3 Responses (n=275)**

Would you like to see this program continued in local schools?		
Response	Count of Response	Percent of Respondents
Yes	271	99%
No	4	1%

**Table 60. Survey Question B4 Responses (n=282)**

Do you remember completing activities from the Student Guide? These activities may have included recording types of bulbs you use in your home, testing the flow rate of your existing and new showerhead, discussing any phantom loads (devices that use power even when they are turned off)?		
Response	Count of Response	Percent of Respondents
Yes	224	79%
No	58	21%

**Table 61. Survey Question B5a Responses (n=209)**

For the following statements please check the box that corresponds with whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. - The activities in the Student Guide were fun to complete.		
Response	Count of Response	Percent of Respondents
Strongly agree	118	56%
Somewhat agree	89	43%
Somewhat disagree	2	1%
Strongly disagree	0	0%
Don't know	2	

**Table 62. Survey Question B5b Responses (n=213)**

For the following statements please check the box that corresponds with whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. - The activities in the Student Guide were relevant to my home.		
Response	Count of Response	Percent of Respondents
Strongly agree	119	56%
Somewhat agree	86	40%
Somewhat disagree	8	4%
Strongly disagree	0	0%
Don't know	0	

**Table 63. Survey Question B5c Responses (n=210)**

For the following statements please check the box that corresponds with whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. - By completing the activities in the Student Guide my family learned about our home's energy use.		
Response	Count of Response	Percent of Respondents
Strongly agree	132	63%
Somewhat agree	69	33%
Somewhat disagree	7	3%
Strongly disagree	2	1%
Don't know	0	

**Table 64. Survey Question B5d Responses (n=211)**

For the following statements please check the box that corresponds with whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. - 4. By completing the activities in the Student Guide my family learned how to use energy wisely.		
Response	Count of Response	Percent of Respondents
Strongly agree	120	57%
Somewhat agree	85	40%
Somewhat disagree	5	2%
Strongly disagree	1	0%
Don't know	0	

**Table 65. Survey Question B6 Responses (n=274)**

Do you remember receiving written information in your kit on how to install the energy efficient items in your home?		
Response	Count of Response	Percent of Respondents
Yes	262	96%
No	12	4%

**Table 66. Survey Question B7 Responses (n=254)**

How useful did you find the installation instructions that were provided in the kit?		
Response	Count of Response	Percent of Respondents
Very useful	132	52%
Useful	114	45%
Not too useful	8	3%
Not useful at all	0	0%
Not applicable - I have not installed any items yet	0	

**Table 67. Survey Question B9a Responses (n=199)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - High-efficiency showerhead		
Response	Count of Response	Percent of Respondents
Very satisfied	103	52%
Somewhat satisfied	63	32%
Not too satisfied	18	9%
Not satisfied at all	15	8%

**Table 68. Survey Question B9b Responses (n=189)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - High-efficiency kitchen faucet aerator		
Response	Count of Response	Percent of Respondents
Very satisfied	97	51%
Somewhat satisfied	64	34%

Not too satisfied	12	6%
Not satisfied at all	16	8%

**Table 69. Survey Question B9c Responses (n=189)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - High-efficiency bathroom faucet aerator		
Response	Count of Response	Percent of Respondents
Very satisfied	97	51%
Somewhat satisfied	70	37%
Not too satisfied	13	7%
Not satisfied at all	9	5%

**Table 70. Survey Question B9d Responses (n=252)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - LED light bulbs		
Response	Count of Response	Percent of Respondents
Very satisfied	238	94%
Somewhat satisfied	12	5%
Not too satisfied	2	1%
Not satisfied at all	0	0%

**Table 71. Survey Question B9e Responses (n=159)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - Dirty furnace filter whistle		
Response	Count of Response	Percent of Respondents
Very satisfied	87	55%
Somewhat satisfied	47	30%
Not too satisfied	16	10%
Not satisfied at all	9	6%

**Table 72. Survey Question B9f Responses (n=189)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - Hot water pipe insulation		
Response	Count of Response	Percent of Respondents
Very satisfied	131	69%
Somewhat satisfied	49	26%
Not too satisfied	8	4%
Not satisfied at all	1	1%

**Table 73. Survey Question B9g Responses (n=124)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - Shower timer		
Response	Count of Response	Percent of Respondents
Very satisfied	65	52%

Somewhat satisfied	44	35%
Not too satisfied	11	9%
Not satisfied at all	4	3%

**Table 74. Survey Question B9h Responses (n=167)**

For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. - "Turn it Off" Stickers		
Response	Count of Response	Percent of Respondents
Very satisfied	91	54%
Somewhat satisfied	54	32%
Not too satisfied	13	8%
Not satisfied at all	9	5%

## C. Installation Rates

**Table 75. Survey Question C2a Responses (n=19)**

Why did you remove the high-efficiency showerhead?		
Response	Count of Response	Percent of Respondents
It broke	0	0%
I didn't need it	1	5%
It didn't work well	7	37%
I didn't like how it looked	0	0%
Other	11	58%

**Table 76. Survey Question C2b Responses (n=9)**

Why did you remove the high-efficiency kitchen faucet aerator?		
Response	Count of Response	Percent of Respondents
It broke	0	0%
I didn't need it	1	11%
It didn't work well	1	11%
I didn't like how it looked	1	11%
Other	6	67%

**Table 77. Survey Question C2c Responses (n=14)**

Why did you remove the high-efficiency bathroom faucet aerator?		
Response	Count of Response	Percent of Respondents
It broke	0	0%
I didn't need it	4	29%
It didn't work well	2	14%
I didn't like how it looked	1	7%
Other	7	50%



**Table 78. Survey Question C2d Responses (n=7)**

Why did you remove the dirty furnace filter whistle?		
Response	Count of Response	Percent of Respondents
It broke	0	0%
I didn't need it	4	57%
It didn't work well	1	14%
I didn't like how it looked	0	0%
Other	2	29%

**Table 79. Survey Question C2e Responses (n=8)**

Why did you remove the hot water pipe insulation?		
Response	Count of Response	Percent of Respondents
It broke	0	0%
I didn't need it	3	38%
It didn't work well	0	0%
I didn't like how it looked	0	0%
Other	5	62%

**Table 80. Survey Question C2f Responses (n=13)**

Why did you remove the LED bulb(s)?		
Response	Count of Response	Percent of Respondents
The bulb(s) broke or burned out	2	15%
I didn't need them	1	8%
They didn't work well	1	8%
I didn't like how they looked	0	0%
Other	9	69%

**Table 81. Survey Question C4a Responses (n=82)**

Why didn't you install the Energy Efficiency Kit showerhead?		
Response	Count of Response	Percent of Respondents
It was difficult to install	1	1%
I didn't need it	26	32%
I plan to install it later	21	26%
It didn't fit	11	13%
Other	23	28%

**Table 82. Survey Question C4b Responses (n=92)**

<b>Why didn't you install the Energy Efficiency Kit kitchen aerator?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
It was difficult to install	4	4%
I didn't need it	21	23%
I plan to install it later	18	20%
It didn't fit	27	29%
Other	22	24%

**Table 83. Survey Question C4c Responses (n=83)**

<b>Why didn't you install the Energy Efficiency Kit bathroom aerator?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
It was difficult to install	5	6%
I didn't need it	21	25%
I plan to install it later	21	25%
It didn't fit	20	24%
Other	16	19%

**Table 84. Survey Question C4d Responses (n=106)**

<b>Why didn't you install the Energy Efficiency dirty furnace whistle?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
It was difficult to install	5	5%
I didn't need it	34	32%
I plan to install it later	23	22%
It didn't fit	20	19%
Other	24	23%

**Table 85. Survey Question C4e Responses (n=59)**

<b>Why didn't you install the Energy Efficiency Kit hot water pipe insulation?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
It was difficult to install	2	3%
I didn't need it	30	51%
I plan to install it later	15	25%
It didn't fit	1	2%
Other	11	19%

**Table 86. Survey Question C4f Responses (n=40)**

<b>Why didn't you install all of the Energy Efficiency Kit LED bulbs?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
They were difficult to install	0	0%
I didn't need them	5	13%
I plan to install them later	26	65%
They didn't fit	0	0%
Other	9	23%

**Table 87. Survey Question C5a Responses (n=1)**

<b>What was difficult about installing the Energy Efficiency Kit showerhead?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
The item is of poor quality	0	0%
The item did not fit or could not be installed in my home	0	0%
My home already has the item	1	100%
We did not have the proper tools for installation	0	0%
Other	0	0%

**Table 88. Survey Question C5b Responses (n=4)**

<b>What was difficult about installing the Energy Efficiency Kit kitchen aerator?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
The item is of poor quality	0	0%
The item did not fit or could not be installed in my home	4	100%
My home already has the item	0	0%
We did not have the proper tools for installation	0	0%
Other	0	0%

**Table 89. Survey Question C5c Responses (n=5)**

<b>What was difficult about installing the Energy Efficiency Kit bathroom aerator?</b>		
<b>Response</b>	<b>Count of Response</b>	<b>Percent of Respondents</b>
The item is of poor quality	0	0%
The item did not fit or could not be installed in my home	4	80%
My home already has the item	1	20%
We did not have the proper tools for installation	0	0%
Other	0	0%

**Table 90. Survey Question C5d Responses (n=5)**

What was difficult about installing the Energy Efficiency Kit dirty furnace filter whistle?		
Response	Count of Response	Percent of Respondents
The item is of poor quality	1	20%
The item did not fit or could not be installed in my home	3	60%
My home already has the item	0	0%
We did not have the proper tools for installation	1	20%
Other	0	0%

**Table 91. Survey Question C5e Responses (n=2)**

What was difficult about installing the Energy Efficiency Kit pipe wrap?		
Response	Count of Response	Percent of Respondents
The item is of poor quality	0	0%
The item did not fit or could not be installed in my home	2	100%
My home already has the item	0	0%
We did not have the proper tools for installation	0	0%
Other	0	0%

(No responses received for C5f)

**Table 92. Survey Question C6a Responses (n=76)**

What did you do with the high-efficiency showerhead that you did not install?		
Response	Count of Response	Percent of Respondents
Gave it to someone else	16	21%
Kept it but haven't used it	59	78%
Thrown away or recycled it	1	1%

**Table 93. Survey Question C6b Responses (n=91)**

What did you do with the high-efficiency kitchen faucet aerator that you did not install?		
Response	Count of Response	Percent of Respondents
Gave it to someone else	10	11%
Kept it but haven't used it	78	86%
Thrown away or recycled it	3	3%

**Table 94. Survey Question C6c Responses (n=83)**

What did you do with the high-efficiency bathroom faucet aerator that you did not install?		
Response	Count of Response	Percent of Respondents
Gave it to someone else	12	14%
Kept it but haven't used it	67	81%
Thrown away or recycled it	4	5%

**Table 95. Survey Question C6d Responses (n=104)**

What did you do with the dirty furnace filter whistle that you did not install?		
Response	Count of Response	Percent of Respondents
Gave it to someone else	10	10%
Kept it but haven't used it	84	81%
Thrown away or recycled it	10	10%

**Table 96. Survey Question C6e Responses (n=63)**

What did you do with the hot water pipe insulation that you did not install?		
Response	Count of Response	Percent of Respondents
Gave it to someone else	8	13%
Kept it but haven't used it	53	84%
Thrown away or recycled it	2	3%

**Table 97. Survey Question C6f Responses (n=36)**

What did you do with the LED bulbs that you did not install?		
Response	Count of Response	Percent of Respondents
Gave them to someone else	0	0%
Kept but haven't used them	35	97%
Thrown away or recycled them	1	3%

## D. Participant Satisfaction with Ameren Missouri

**Table 98. Survey Question D1 Responses (n=209)**

Thinking about your overall experiences with Ameren Missouri as your utility, how satisfied would you say you are with Ameren Missouri?		
Response	Count of Response	Percent of Respondents
Very satisfied	130	62%
Somewhat satisfied	66	32%
Not too satisfied	11	5%
Not at all satisfied	2	1%

**Table 99. Survey Question D3 Responses (n=217)**

Based on your experience with this program, would you say your satisfaction with Ameren Missouri has:		
Response	Count of Response	Percent of Respondents
Increased	115	53%
Stayed about the same	101	47%
Decreased	1	0%

## Appendix C. Bibliography

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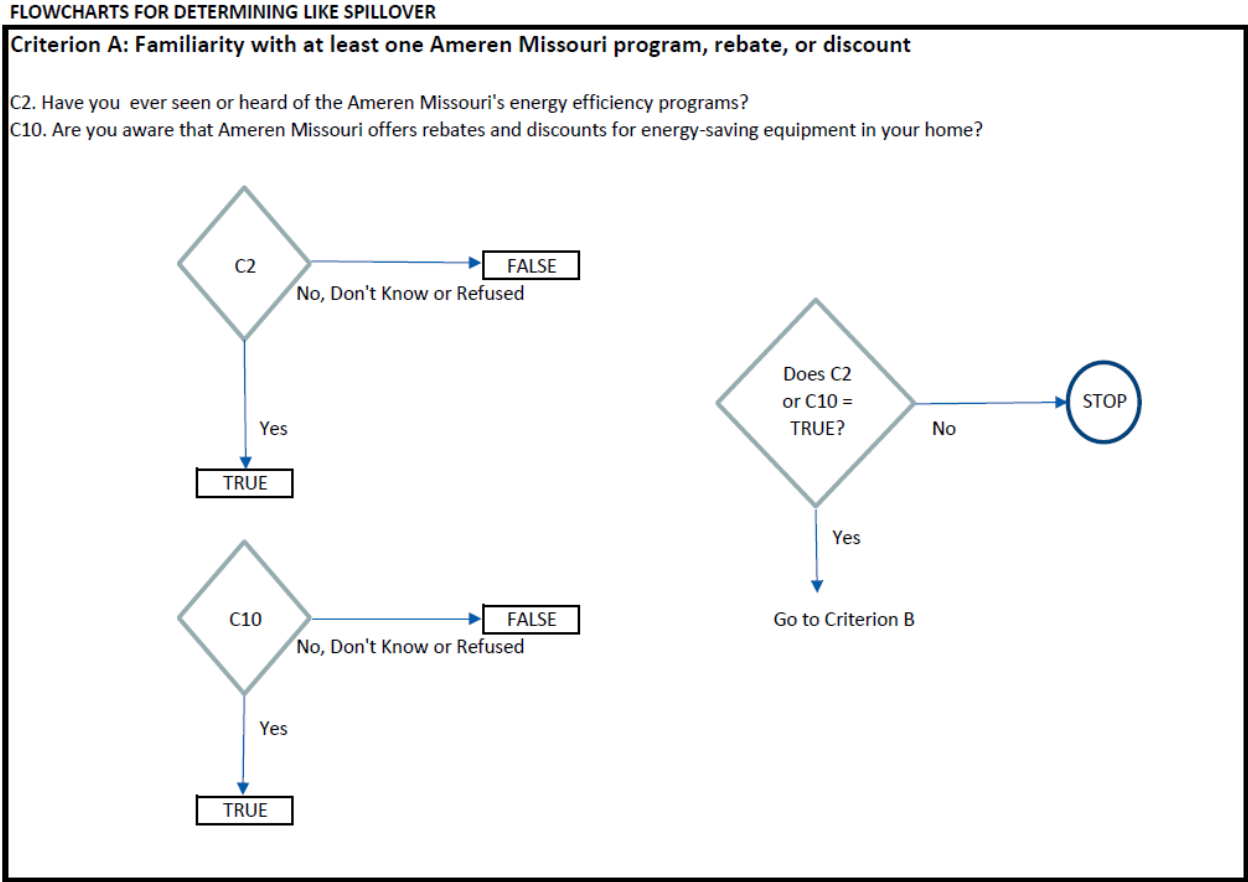
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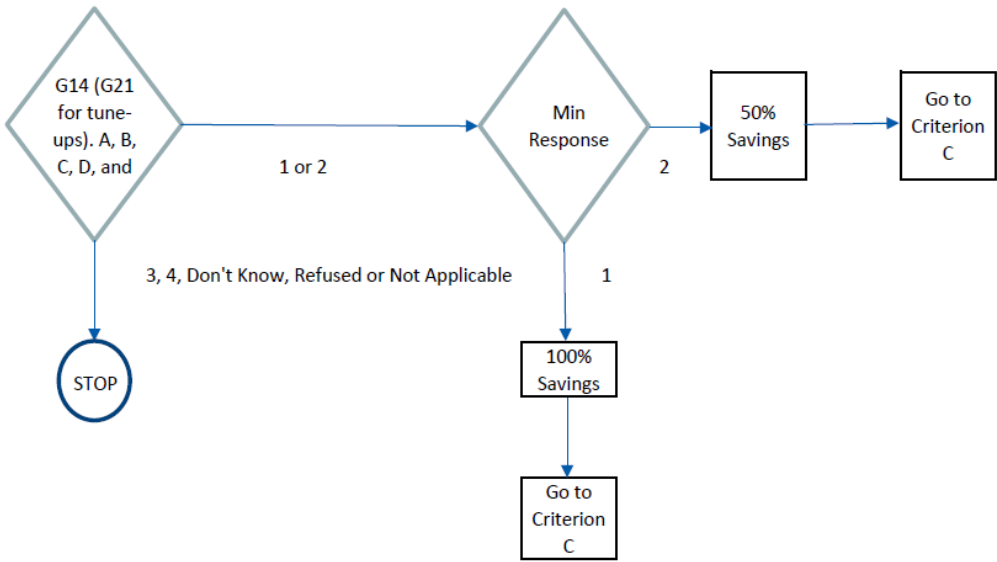
# Appendix D. Nonparticipant Spillover Qualification Flow Charts



**Criterion B: At least one element of Ameren Missouri's program marketing and outreach motivated them to adopt the measure**

G14 (G21 for tune-ups). On a 1 to 4 scale, with 1 meaning "very important", and 4 meaning "not at all important", how important was each of the following elements in your decision to purchase and install the measure?

- A. Information about energy savings from Ameren Missouri's marketing or bill insert
- B. Ameren Missouri's marketing information from a contractor or retailer
- C. Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri
- D. Past participation in an Ameren Missouri energy efficiency program
- E. Information from the energy assessment conducted at your home through Ameren Missouri





Appendix E. Stakeholder Interview Guide

Appendix F. Student Family Survey

Appendix G. Property Manager Survey

Appendix H. 1. Nonparticipant Spillover Data; 2.

General Population Survey

## Appendix E: Ameren Missouri Energy Efficiency Kits Stakeholder Interview

Respondent name: \_\_\_\_\_ **Guide PY17**

Respondent phone: \_\_\_\_\_

Interview date: \_\_\_\_\_ Interviewer initials: \_\_\_\_\_

For the Energy Efficiency Kits program evaluation, Cadmus will interview stakeholders annually. The interview will focus on PY17 program changes and identify recommendations for improving subsequent program years.

### Roles and Responsibilities

- 1) Has anything changed about your role and responsibilities for Ameren Missouri's Energy Efficiency Kits Program?
  - a. For IFC: Can you please describe the IFC team that helps to implement the program? [Probe: roles of staff, number people involved, etc.]
- 2) Who do you coordinate with regarding the program? [Probe: internal and external program stakeholders]
  - a. What types of communication do you have with these program stakeholders (i.e., formal or informal)?

### Program Goals

- 3) The filed program plans for this program showed an estimated annual savings target of 6,214 MWh and 1.046 MW and a goal of 94,424 measure installations, are these the current goals?
  - a. How were these goals determined?
  - b. For FY17, how are these goals divided between the two delivery channels: school kits and multifamily kits?

### Changes to Program Design and Implementation

- 4) There have been a few changes to the Energy Efficiency Kits program since PY16, could you tell me a little about the reasons for each of the following changes:
  - a. Addition of the flow test bag and "Turn it off stickers" to the School Kits

- b. Showerhead for Multifamily kits
  - c. Others?
- 5) Have there been any other program changes since PY16?
- a. [IF YES] Can you describe the changes and reasons for the changes?
- 6) For the multifamily kits delivery channel, apart from kit items changing, have there been any program design or implementation changes between PY16 and PY17?

### **PY17 Program Design and Implementation: School Kit Delivery Channel**

- 7) Has anything changed about how the School Kit Delivery Channel is implemented?
- 8) How about for how schools qualify to participate in the program?
- a. How many schools were repeat participants from the previous year?
- 9) Did anything change about how the school kit delivery channel is marketed?
- 10) Did the kit contents change other than what we spoke about at the start of the interview? [if yes, how?; Were shower timers added?]
- a. In your opinion, should any additional measures be considered for inclusion in future kits?
  - b. Conversely, should any measures be excluded in future kits?
- 11) Where there any changes to the goals of the energy education curriculum?
- 12) Has the energy education curriculum or teacher support included with the kits been further developed in PY17? [if needed, prompt with suggestions from PY16 teacher survey: enhanced installation instructions/video, simpler light bulb wattage worksheet, improved hydroelectric power curriculum; instructional video for classroom activities; incorporating poster content into other materials (handouts, dvd); integrating website with program]
- 13) What feedback have you received from school teachers or administrators about the program?
- 14) How are the results from the student Home Energy Worksheet used?
- a. Is there a still survey for the teachers? If yes, how are the results from this survey used? (any further feedback about challenges with students not taking kits home?)

### **Program Tracking: School Kits Delivery Channel**

- 15) Have there been any changes to the way you track schools and number of kits provided this year?

- a. Is NEF still responsible for maintaining and updating program data?
  - b. How about for how the kits are tracked for each program?
    - i. Are kit surveys traceable to kits
    - ii. Are kits traceable to teachers and/or schools?
- 16) Do teachers still order the kits on behalf of the school?
- a. How long does it take for kits to arrive?
- 17) In order to decide how many kits a school needs, is this still based on the numbers that teachers gave online during registration, followed by confirmation by NEF prior to kit shipment?
- a. Was it still possible to return kits in PY17? (If kits could be returned, was there any communication about the kit return process in PY17?)

### **PY17 Program Design and Implementation: Multifamily Kit Delivery Channel (NOT NEF)**

- 18) Have there been any changes in PY17 to how property managers qualify to participate in the program?
- a. Can properties participate multiple years or only once? If allowed, what is the reasoning?
  - b. How is property manager participation tracked?
- 19) Have there been any changes to how the multifamily kit delivery channel is marketed for PY17?
- c. How did you develop a list of property managers to contact? (Is the Low-Income program still the primary avenue for developing relationships with property owners?)
- 20) 10) Did the kit contents change other than what we spoke about at the start of the interview?
- d. In your opinion, should any additional measures be considered for inclusion in future kits?
  - e. Conversely, should any measures be excluded in future kits?
- 21) Have you received any feedback in PY17 from property managers or their tenants about the program or kit contents?
- 22) Expecting any more participants this year?

### **Program Tracking: Multifamily Kits Delivery Channel (NOT NEF)**

- 1) What tools or systems are in place to track program activities?
  - a. Is ICF still responsible for maintaining and updating program data?
- 2) Are property managers sent complete kits or individual kit items in bulk?
  - a. How long does it take for (kits/kit items) to arrive?
- 3) How do you decide how many (kits/kit items) a property manager needs?
  - a. After calculating the number of (kits/kit items), what type of auditing/verification do you perform, if any?
  - b. Are there systems in place to prevent property managers from receiving too many or too few (kits/kit items)?
  - c. What happens when items are not installed? [Probe: are they mailed back?]

### **Successes, Challenges, Suggestions for Improvement**

15. In your opinion, how has the program performed in PY17 (in terms of both process and savings/participation goals)?
  - a. What are the biggest challenges of the program?
16. What changes are being planned or considered for PY18?
  - a. Why are these changes being considered?
  - b. How, if at all, are you anticipating the program to change in the long-term future for the next cycle?
17. Overall, do you have any suggestions for how to improve the program?
18. What issues would you like to see the evaluation help you solve?
  - a. What would you most like to see addressed or presented in the evaluation?
  - b. Do you have any feedback on last year's evaluation? [Probe: what would you like to be different]

**Appendix F. Student Family Survey**

**Ameren Missouri 2017 Energy Efficiency Kits:  
School Delivery Channel Online Parent Survey**

This survey will gather data to estimate freeridership, spillover and assess any changes in installation of school kit items. To avoid duplication of effort, this survey, wherever possible, will not ask for information that has already been gathered by ICF on Home Energy Worksheets. The Home Energy Worksheet asks participants how many kit items they installed, their satisfaction with the program, and questions about the participant’s home including number of occupants.

Topic	Researchable Questions	Item
Screenener		Section A
Satisfaction with Program and Kit Items	How satisfied are participants with the program and the kit items? Do participants have suggestions for improving the program?	Section B
Installation Rates	What are the installation rates of the various measures? How easy was the process of installing the measures?	Section C
Satisfaction with Ameren Missouri	How satisfied are participants with Ameren Missouri?	Section D
Free ridership	Would the participant have purchased the product without the program?	Section E
Spillover	Did the Ameren program influence the participant purchase any other energy-efficient equipment?	Section F
Demographics	Participant Demographics	Section G

**Target Quota = Census of Collected Data**

General Instructions

- Open-ended responses are in green [LIKE THIS]
- Programming instructions are in red [LIKE THIS] (not visible to the respondents)
- Skipped responses are not visible (99 = code for nothing selected/skipped question)

Variables to be Pulled into Survey

- [SCHOOL NAME] = The name of the school their student attends
- [LED QTY] = quantity of LEDs (0 to 4)
- [SHOWERHEAD] = measure status from tracking data (1, 2, 3 or 99)
- [KITCHAER] = measure status from tracking data (1, 2, 3 or 99)
- [BATHAER] = measure status from tracking data (1, 2, 3 or 99)
- [WHISTLE] = measure status from tracking data (1, 2, 3 or 99)
- [HWPWRAP] = measure status from tracking data (1, 2, 3 or 99)
- [LED\_TOTALQTY] = sum of LED QTY for responses from same email in tracking data
- [SHOWERHEAD\_QTY] = calculated showerhead quantity from measure status and number of responses in tracking data

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- **[KITCHAER\_QTY]** = calculated kitchen aerator quantity from measure status and number of responses in tracking data
- **[BATHAER\_QTY]** = calculated bathroom aerator quantity from measure status and number of responses in tracking data
- **[WHISTLE\_QTY]** = calculated furnace whistle quantity from measure status and number of responses in tracking data
- **[HWPWRAP\_QTY]** = calculated pipe wrap quantity (number of lengths) from measure status and number of responses in tracking data
- **[LED\_NOTINSTALLED]** = quantity of LEDs not installed from tracking data (incorporating number of responses in tracking data)
- **[SHOWERHEAD\_NOTINSTALLED]** = quantity of showerheads not installed from tracking data
- **[KITCHAER\_NOTINSTALLED]** = quantity of kitchen aerators not installed from tracking data
- **[BATHAER\_NOTINSTALLED]** = quantity of bath aerators not installed from tracking data
- **[WHISTLE\_NOTINSTALLED]** = quantity of furnace whistles not installed from tracking data
- **[HWPWRAP\_NOTINSTALLED]** = quantity of pipe wrap lengths not installed from tracking data
- **[TYPE]** = Electric + Spire or Electric Only
- **[HEW\_QTY]** = number of HEW responses by email

## A. Screener



- A1. Thank you for participating in **Ameren Missouri’s Energy Efficiency School Kits Program**. We would like to know more about your experience with the program. Our records indicate that your family received an Energy Efficiency Kit from **[SCHOOL NAME]**. Is this correct? **[FORCED RESPONSE (NO SKIP)]**
1. Yes, I received one Energy Efficiency Kit
  2. Yes, I received two Energy Efficiency Kits
  3. Yes, I received three or more Energy Efficiency Kits
  4. No, I did not receive Energy Efficiency Kit **[TERMINATE TEXT: We are only surveying customers who received Energy Efficiency Kits at the present time, but Ameren Missouri appreciates you for taking time to respond. Thank you. Have a nice day!]**
- A2. **\*Are you or any members of your household employed by Ameren Missouri? [FORCED RESPONSE, NO SKIP OR DON’T KNOW]**
1. Yes, I or someone in my household works for Ameren Missouri **[TERMINATE TEXT: We are not surveying Ameren Missouri employee households, but we appreciate you for taking time to respond. Thank you. Have a nice day!]**
  2. No, no one in my household works for Ameren Missouri
- A3. Is Ameren Missouri your electricity provider?
1. Yes
  2. No
  98. Don’t Know
  99. (Skipped)
- A4. Who is your gas provider?
1. Ameren Missouri
  2. Spire
  3. Another provider **[SPECIFY: \_\_\_\_\_]**
  4. Don’t have a gas provider
  98. Don’t know
  99. (Skipped)

**B. Satisfaction with Program and Kit Items**

First, I’d like to know more about your satisfaction with Ameren Missouri’s Energy Efficiency Kits School Program.



B1. For the following statement, check the box that corresponds with whether you strongly agree, somewhat agree, agree, somewhat disagree, or strongly disagree with the following statement:

**[RECORD 1=STRONGLY AGREE, 2=SOMEWHAT AGREE, 3=AGREE, 4=SOMEWHAT DISAGREE, 5=STRONGLY DISAGREE, 98=DON'T KNOW, OR 99=REFUSED FOR THE STATEMENT]**

1. "I am satisfied with my child's experience in the Ameren Missouri Energy Efficiency Kits School Program."

B2. **[ASK IF B1=1,2,3,4, OR 5]** Why do you **[RATING FROM B1]** with the statement?

**[OPEN ENDED RESPONSE: \_\_\_\_\_]**

B3. Would you like to see this program continued in local schools?

1. Yes
2. No
98. Don't Know
99. Skipped

**Commented [DL1]:** The preamble could be shortened to something like "Please check the box that corresponds to how much you agree with the statement below:" (no need to repeat response options shown immediately below).

**Commented [AD2R1]:** For next year?

B4. Do you remember completing activities from the *Student Guide*? These activities may have included recording types of bulbs you use in your home, testing the flow rate of your existing and new showerhead, discussing any phantom loads (devices that use power even when they are turned off)?

1. Yes
2. No

B5. **[IF B4=1]** For the following statements please check the box that corresponds with whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. **[MULTIPLE OPTIONS 1=STRONGLY AGREE, 2=SOMEWHAT AGREE, 3=SOMEWHAT DISAGREE, 4=STRONGLY DISAGREE, 98=DON'T KNOW, OR 99=REFUSED FOR EACH STATEMENT] [RANDOMIZE ORDER]**

1. The activities in the *Student Guide* were fun to complete.
2. The activities in the *Student Guide* were relevant to my home.
3. By completing the activities in the *Student Guide* my family learned about our home's energy use.
4. By completing the activities in the *Student Guide* my family learned how to use energy wisely.

B6. Do you remember receiving written information in your kit on how to install the energy efficient items in your home?

1. Yes
2. No

B7. **[IF B6=1]** How useful did you find the installation instructions that were provided in the kit?

1. Very useful
2. Useful
3. Not too useful
4. Not useful at all
5. Not applicable – I have not installed any items yet **[SKIP SECTION C INSTALLATION RATES AFTER END OF SECTION B]**
98. Don't know
99. Skipped

**Commented [AD3]:** See above for next year—how about: "...that corresponds with your opinion of the following statements."

B8. **[IF B7=3,4]** Why do you say that?  
**[SPECIFY: \_\_\_\_\_]**

B9. For each Energy Efficiency Kit item below, rate how satisfied you are with that kit item. **[SINGLE RESPONSE; DROP DOWN MENU THAT DOES NOT REPEAT THE RESPONSE OPTIONS]**

Question	Energy Efficiency Kit Item	Very Satisfied	Somewhat Satisfied	Not Too Satisfied	Not Satisfied At All	Don't Know
B9a.	High-efficiency showerhead					
B9b.	High-efficiency kitchen faucet aerator					
B9c.	High-efficiency bathroom faucet aerator					
B9d.	LED Light Bulbs					
B9e.	Dirty furnace filter whistle					
B9f.	Hot water pipe insulation					
B9g.	Shower timer					
B9h.	“Turn it Off” Stickers					

B10. **[IF FOR B9A. TO B9H. ANSWERED NOT TOO SATISFIED OR NOT SATISFIED AT ALL]** Why are you **[ANSWER FROM B9A. TO B9H.]** with the **[INSERT ENERGY EFFICIENCY KIT ITEM B9A. TO B9H.]**?  
**[SPECIFY: \_\_\_\_\_]**

B11. What suggestions, if any, do you have for improving this program? Please write your suggestions in the box below.  
**[OPEN ENDED RESPONSE: \_\_\_\_\_]**

**C. Installation Rates**

**[IF ANY \_QTY OR NOT INSTALLED FIELD > 0]** Each Energy Efficiency Kit contained the following energy efficient items for you to install in your home, in addition to other materials and installation instructions:

- Four ENERGY STAR® certified LED bulbs
- One high-efficiency showerhead
- One high-efficiency kitchen faucet aerator
- One high-efficiency bathroom faucet aerator
- One dirty furnace filter whistle
- Hot water pipe insulation (3 feet)

We'd like to now follow up with you on the installation of the Energy Efficiency Kit items.

- C1. **[IF ANY\_QTY FIELD > 0 AND B7 ≠ 5]** In the Home Energy Worksheet you'd indicated that you installed the following type and number of items. Of these, how many are still installed?

Question	Energy Efficiency Kit Item	Number still installed? [VALIDATE THAT RESPONSE ≤ MEASURE QUANTITY]
C1a.	<b>[IF SHOWERHEAD_QTY &gt;0]</b> Of the <b>SHOWERHEAD_QTY</b> high-efficiency showerhead(s)...	---
C1b.	<b>[IF KITCHAER_QTY &gt;0]</b> Of the <b>KITCHAER_QTY</b> high-efficiency kitchen faucet aerator(s)...	---
C1c.	<b>[IF BATHAER_QTY &gt;0]</b> Of the <b>BATHAER_QTY</b> high-efficiency bathroom faucet aerator(s)...	---
C1d.	<b>[IF WHISTLE_QTY &gt;0]</b> Of the <b>WHISTLE_QTY</b> dirty Furnace filter whistle(s)...	---
C1e.	<b>[IF HWPWRAP_QTY &gt;0]</b> Of the <b>HWPWRAP_QTY</b> piece(s) of hot water pipe insulation...	---
C1f.	<b>[IF LED_TOTALQTY &gt;0]</b> Of the <b>LED_TOTALQTY</b> LED bulb(s)...	---

**Commented [AD4]:** For PY18 consult with Brian Evans about a better approach for this. He advises not referring to quantities from the HEW, but just to the standard number of items in the kit. There were some mathematical contortions we had to make for the ISR calcs.

- C2. **[ASK FOR EACH ITEM IN C1 WHERE "QUANTITY INSTALLED ≠ "HOW MANY OF THESE ITEMS ARE STILL INSTALLED"]** Why did you remove the [INSERT ITEM NOT INSTALLED]?

1. It broke **[OR ALTERNATE FOR LEDS]:** The bulb(s) broke or burned out
2. I didn't need it **[OR ALTERNATE FOR LEDS]:** I didn't need them
3. It didn't work well **[OR ALTERNATE FOR LEDS]:** they didn't work well
4. I didn't like how it looked **[OR ALTERNATE FOR LEDS]:** I didn't like how they looked
5. Other **[SPECIFY: \_\_\_\_\_]**
98. Don't Know
99. Skipped

**Commented [DL5]:** Perhaps these should be multiple-response (they could think it didn't work well AND they didn't like the look, etc.) – as is the case at C5.

**Commented [AD6R5]:** Kept as for prior year

C3. **[IF ANY \_NOTINSTALLED FIELD > 0]** In the Home Energy Worksheet, you indicated that the following items were not installed or you left the answer blank. Of these, please indicate the number of items that you have since installed.

Question	Energy Efficiency Kit Item	Number installed since? <b>[VALIDATE THAT RESPONSE ≤ NOT INSTALLED QUANTITY]</b>
C3a.	<b>[IF SHOWERHEAD_NOTINSTALLED &gt;0]</b> Of the <b>SHOWERHEAD_NOTINSTALLED</b> high-efficiency showerhead(s)...	_____
C3b.	<b>[IF KITCHAER_NOTINSTALLED &gt;0]</b> Of the <b>KITCHAER_NOTINSTALLED</b> high-efficiency kitchen faucet aerator(s)...	_____
C3c.	<b>[IF BATHAER_NOTINSTALLED &gt;0]</b> Of the <b>BATHAER_NOTINSTALLED</b> high-efficiency bathroom faucet aerator(s)...	_____
C3d.	<b>[IF WHISTLE_NOTINSTALLED &gt;0]</b> Of the <b>WHISTLE_NOTINSTALLED</b> dirty furnace filter whistle(s)...	_____
C3e.	<b>[IF HWPWRAP_NOTINSTALLED &gt;0]</b> Of the <b>HWPWRAP_NOTINSTALLED</b> piece(s) of hot water pipe insulation...	_____
C3f.	<b>[IF LED_NOTINSTALLED &gt;0]</b> Of the LED Bulb(s)...	_____

C4. **[IN C3 IF “QUANTITY NOT INSTALLED” ≠ “INSTALLED SINCE”]** Why didn't you install **[FOR LEDS ONLY ADD “all of”]** the Energy Efficiency Kit **[INSERT ITEM NOT INSTALLED]**? Check all that apply. **[MULTIPLE RESPONSES, CHECK ALL THAT APPLY]**

1. It was difficult to install
2. I didn't need it
3. I plan to install it later
4. It didn't fit
5. Other **[SPECIFY: \_\_\_\_\_]**
98. Don't Know
99. Skipped

C5. **[IF C4=1]** What was difficult about installing the Energy Efficiency Kit **[INSERT ITEM NOT INSTALLED]**? Check all that apply. **[MULTIPLE RESPONSES, CHECK ALL THAT APPLY]**

- 1. The item is of poor quality
- 2. The item did not fit or could not be installed in my home
- 3. My home already has the item
- 4. We did not have the proper tools for installation
- 5. Other **[SPECIFY: \_\_\_\_\_]**
- 98. Don't Know
- 99. Skipped

C6. **[ASK FOR EACH ITEM IN C3 IF "QUANTITY NOT INSTALLED" ≠ "INSTALLED NOW" OR LED QTY FINAL LESS THAN LED QTY]** What did you do with the **[INSERT ITEM NOT INSTALLED]** that you did not install? **[FOR LEDS, ALLOW MULTIPLE RESPONSE AND ADD:]** Please check all that apply.

- 1. Gave it to someone else **[OR ALTERNATE FOR LEDS]:** Gave them to someone else
- 2. Kept it but haven't used it **[OR ALTERNATE FOR LEDS]:** Kept but haven't used them
- 3. Thrown away or recycled it **[OR ALTERNATE FOR LEDS]:** Thrown away or recycled them
- 98. Don't Know
- 99. Skipped

**Commented [DL7]:** If QTY for items other than LED can be >1 (because 2 kits), then there should be multiple-response options when QTY>1

**Commented [AD8R7]:** Consider this for PY18

**D. Participant Satisfaction with Ameren Missouri**

Next, I'd like to know more about your experiences with Ameren Missouri as your utility.

D1. Thinking about your overall experiences with Ameren Missouri as your utility, how satisfied would you say you are with Ameren Missouri?

- 1. Very satisfied
- 2. Somewhat satisfied
- 3. Not too satisfied
- 4. Not at all satisfied
- 98. Don't know
- 99. Skipped

D2. **[ASK IF D1 = 1, 2, 3 OR 4]** Why are you **[ANSWER FROM D1]** with Ameren Missouri?  
**[OPEN ENDED RESPONSE: \_\_\_\_\_]**

D3. Based on your experience with this program, would you say your satisfaction with Ameren Missouri has:

1. Increased
2. Stayed about the same
3. Decreased
98. Don't Know
99. (Skipped)

**E. Free Ridership**

E1. Would you have purchased and installed any of the Energy Efficiency Kit items in your home if you had not received them in your kit from Ameren Missouri?

1. Yes **[CONTINUE TO E2]**
2. No **[SKIP TO E3]**
3. I would have purchased some items, but not all **[SKIP TO E4]**
98. Don't Know
99. Skipped

E2. **[IF E1=1, 98, 99]** Would have you have purchased and installed the same type and number of each item in the Energy Efficiency Kit?

1. Yes **[SKIP TO E6]**
2. No **[SKIP TO E4]**
98. Don't know **[SKIP TO E4]**
99. Skipped **[SKIP TO F1]**

E3. **[IF E1 =2]** To confirm, you would not have purchased and installed any Energy Efficiency Kit items at all, is that correct?

1. Yes, correct **[SKIP TO F1]**
2. No **[CONTINUE TO E4]**
98. Don't know **[CONTINUE TO E4]**
99. Skipped **[SKIP TO F1]**

E4. Which Energy Efficiency Kit items would you have purchased and installed? Check all that apply.

**[MULTIPLE RESPONSES, CHECK ALL THAT APPLY]**

1. High-efficiency showerhead
2. High-efficiency kitchen faucet aerator
3. High-efficiency bathroom faucet aerator
4. LED Light Bulbs
5. Dirty furnace filter whistle
6. Hot water pipe insulation
7. Shower timer
98. Don't know
99. Skipped

E5. **[IF E4=4]** The Energy Efficiency Kit came with four LED light bulbs. How many LEDs would you have purchased and installed without the kit?

1. **[OPEN ENDED NUMERIC RESPONSE: \_\_\_\_\_]**
98. Don't know
99. Skipped



E6. And thinking about timing, without the free kit from Ameren Missouri, check the box that represents when you would most likely have purchased and installed each Energy Efficiency Kit item... **[SINGLE RESPONSE]**

Question	Logic	Energy Efficiency Kit Item	At the same time you received the kit	Later, but within the same year	More than one year out	Never	Don't know
E6a.	<b>E2=1 OR E4=1</b>	High-efficiency showerhead					
E6b.	<b>E2=1 OR E4=2</b>	High-efficiency kitchen faucet aerator					
E6c.	<b>E2=1 OR E4=3</b>	High-efficiency bathroom faucet aerator					
E6d.	<b>E2=1 OR E4=4</b>	LED Light Bulbs					
E6e.	<b>E2=1 OR E4=5</b>	Dirty Furnace Filter Whistle					
E6f.	<b>E2=1 OR E4=6</b>	Hot water pipe insulation					
E6g.	<b>E2=1 OR E4=7</b>	Shower Timer					

## F. Spillover

F1. Since participating in the Energy Efficient School Kits program, have you added any other energy-efficient products in your home or performed any additional energy-saving activities that were not discounted through Ameren Missouri?

1. Yes
2. No **[SKIP TO NEXT SECTION]**
98. Don't Know **[SKIP TO NEXT SECTION]**
99. (Skipped) **[SKIP TO NEXT SECTION]**

F2. **[IF F1=1]** Please select the energy-saving activities you've pursued since your experience with Ameren Missouri's Energy Efficient School Kits program. **[RANDOMIZE ORDER, CHECK ALL THAT APPLY]**

1. Had a home audit
2. Recycled a refrigerator or freezer
3. Constructed an Energy Star New Home
4. Purchased and installed efficient Light fixtures or ceiling fan
  - a. How many of these are currently installed in your home? **[SPECIFY: \_\_\_]**
5. Purchased and installed an efficient refrigerator
6. Purchased and installed an efficient freezer
7. Purchased and installed an efficient clothes washer
8. Purchased and installed an efficient dishwasher
9. Purchased and installed an efficient room air conditioner
  - a. How many did you purchase and install? **[SPECIFY: \_\_\_]**
10. Purchased and installed Energy efficient electronics (e.g. TV, DVD, computer)
11. Purchased and installed an Efficient room air purifier
  - a. How many did you purchase and install? **[SPECIFY: \_\_\_]**
12. Purchased and installed an Efficient pool pump
13. Purchased and installed an Efficient dehumidifier
14. Purchased and installed an Efficient water heater (other than heat pump water heater)
15. Purchased and installed Efficient showerheads
  - a. How many did you purchase and install in your home? **[SPECIFY: \_\_\_\_\_]**
16. Purchased and installed Efficient faucet aerators
  - a. How many did you purchase and install in your home? **[SPECIFY: \_\_\_\_\_]**

17. Purchased and installed an Efficient central air conditioner
18. Purchased and installed an Air source heat pump
19. Purchased and installed a Geothermal heat pump
20. Purchased and installed a Ductless heat pump
21. Purchased and installed a Dual-fuel heat pump
22. Purchased and installed an Efficient Furnace fan
23. Purchased and installed a Heat pump water heater
24. Purchased and installed a Programmable (but not “smart”) thermostat
25. Purchased and installed a Learning or “smart” thermostat
26. Purchased and installed Insulation
27. Purchased and installed Efficient Windows
28. Purchased and installed Solar panels
29. Other items
  - a. Please specify: **[SPECIFY: \_\_\_\_\_]**
98. Don’t Know **[SKIP TO NEXT SECTION]**
99. (Skipped)

**[PRESENT THIS MESSAGE IF F1=1 AND NOTHING SELECTED IN F2]**

You did not check any products or services for the last question.

If you did pursue additional energy-savings activities (that were not discounted by Ameren Missouri) since receiving the kit, please use the back arrow below to return to that question and select one or more answers (select "other items" if you do not see your products or services on the list).

If you did NOT purchase and install any energy-efficient products or services, please use the forward arrow below to continue the survey.

- F3. **[Ask if F2=1]** What kind of changes did you make to your home as a result of the audit?
  1. **[RECORD RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
  
- F4. **[Ask if F2=24 or 25]** What kind of thermostat did you replace with the [“programmable thermostat” or “smart thermostat (may be called a learning thermostat)” from F2]?
  1. **[IF F2=26 “ANOTHER”]** Smart thermostat (may be called a learning thermostat)
  2. **[IF F2=25 “ANOTHER” OR IF F2=26 “A”]** Programmable (but not “smart”) thermostat
  3. Manual thermostat
  98. Don’t Know
  99. (Skipped)

- F5. **[Ask if F2=4, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, F2.20, 21, 22, 23, 26, 27 – ask for each]** How do you know that the **[F2 RESPONSE]** is energy efficient?
1. ENERGY STAR brand
  2. Efficiency rating **[RECORD NUMERIC RESPONSE: \_\_\_\_\_]**
  3. Other **[RECORD RESPONSE: \_\_\_\_\_]**
  98. Don't Know
  99. (Skipped)
- F6. **[ASK if F2 = 26]** How many square feet of insulation did you have installed?
1. **[RECORD NUMERIC RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
- F7. **[ASK if F2 = 27]** How many square feet of windows did you have installed?
1. **[RECORD NUMERIC RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
- F8. **[ASK if F2 = 26]** In what location in your home was the insulation installed?
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
- F9. **[ASK if F2 = 27]** In what location in your home were the windows installed?
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
- F10. **[ASK ONCE FOR EACH ITEM CHECKED IN F2]** Why did you choose to purchase or install the items listed below? **[INSERT TABLE OF CHECKED RESPONSES FROM F2]**
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  99. (Skipped)
- F11. Did you receive a rebate, discount, or tax credit for any of the items listed below? **(If yes, check all that apply.) [INSERT TABLE OF CHECKED RESPONSES FROM F2 – ALLOW MULTIPLE RESPONSE]**
1. Yes, from Ameren Missouri
  2. Yes, from another organization
  3. No
  98. Don't Know
  99. (Skipped)

F12. **[ASK FOR EACH ITEM WHERE F11 = 2]** What organizations besides Ameren Missouri paid the rebates, or provided discounts or tax credits for the items listed below? **[INSERT TABLE OF CHECKED RESPONSES FROM F2]**

Please specify: **[RECORD RESPONSE: \_\_\_\_\_]**

F13. **[FOR MEASURES for which Ameren provides incentives (F2.9, F2.11, F2.12, 17, 18, 19, 20, 21, 22, 23, 25), ASK FOR EACH ITEM WHERE F11= 2 or 3]** Why didn't you apply for a rebate from Ameren Missouri for the purchase of your **[F2 RESPONSE]**?

- 1. **[RECORD RESPONSE: \_\_\_\_\_]**
- 99. (Skipped)

F14. How important was your experience with the **Ameren Missouri's Energy Efficiency School Kits Program** on your decision to purchase or install the **[F2 RESPONSE]**? **[INSERT TABLE OF CHECKED RESPONSES FROM F2]**

- 1. Not at all important
- 2. Not too important
- 3. Somewhat important
- 4. Very important
- 98. Don't Know
- 99. (Skipped)

F15. **[ASK FOR EACH CHECKED ITEM FROM F2]** Prior to purchasing or installing the items listed below, had you heard or read about the benefits of installing this equipment from Ameren Missouri or Ameren Missouri's Act on Energy campaign?

	Yes (1)	No (2)	Don't know (98)
<b>[INSERT 1<sup>st</sup> CHECKED RESPONSE FROM F2]</b>			
<b>[INSERT 2<sup>nd</sup> CHECKED RESPONSE FROM F2]</b>			
<b>[INSERT 3<sup>rd</sup> CHECKED RESPONSE FROM F2]</b>			
<b>[INSERT 4<sup>th</sup> CHECKED RESPONSE FROM F2]</b>			

F16. **[ASK FOR EACH YES RESPONSE IN F15]** How important was the information Ameren Missouri provided about the energy efficiency or money saving benefits of in your decision to purchase or install the items listed below? **[INSERT TABLE OF ALL "YES" RESPONSES FROM F15]**

- 1. Not at all important
- 2. Not too important
- 3. Somewhat important
- 4. Very important
- 98. Don't Know
- 99. (Skipped)

**G. Demographics**

We are almost finished! There are just a few final questions that will help us with our analysis.

- G1. How many people live in your home?
1. One
  2. Two
  3. Three
  4. Four
  5. Five
  6. Six
  7. Seven or more
  8. I prefer not to answer this question
  99. Skipped
- G2. Which of the following best describes your home or residence? **[SELECT ONE RESPONSE]**
1. Single-family home (not a duplex, townhome, or apartment)
  2. Manufactured or modular home
  3. Mobile home
  4. Row house or townhome
  5. Two or three family attached residence
  6. Apartment with four or more units
  7. Condominium
  8. Other
    - a. Please specify: **[SPECIFY: \_\_\_\_\_]**
  98. Don't Know
  99. (Skipped)
- G3. How do you cool your home? Please check all that apply. **[CHECK ALL THAT APPLY]**
1. Central Cooling System
  2. Window AC
  3. Mini-split
  4. Heat pump
  5. Package Terminal System (through wall unit)
  6. I don't have or don't use cooling
  7. Other
    - a. Please specify: **[SPECIFY: \_\_\_\_\_]**
  98. Don't know
  99. (Skipped)

- G4. Which of these fuels primarily heat your home?
1. Natural gas
  2. Electricity
  3. Other fuel
  98. Don't know
  99. (Skipped)
- G5. **[G4=2]** What type of space heating equipment do you have?
1. Electric Furnace
  2. Electric Heat Pump
  3. Electric Baseboard
  4. Other
    - a. Please specify: **[SPECIFY: \_\_\_\_\_]**
  98. Don't know
  99. (Skipped)
- G6. How is your water heated?
1. Natural Gas
  2. Electricity
  3. Other fuel
  98. Don't know
  99. (Skipped)
- G7. How many showers are in your home?
1. One
  2. Two
  3. Three or more
  98. Don't Know
  99. Skipped
- G8. How many kitchen faucets are in your home?
1. One
  2. Two
  3. Three or more
  98. Don't Know
  99. Skipped

G9. How many bathroom faucets are in your home?

1. One
  2. Two
  3. Three or more
98. Don't Know  
99. Skipped

**H. CLOSING**

This completes the survey. We appreciate your participation and thank you for your time.



## Appendix G. Multifamily Interview Guide

### Ameren Missouri 2017 EE Kits Multifamily Telephone Interview Guide

This interview guide is for property managers that have participated in Ameren Missouri’s Multifamily Efficient Kits program. Eligible participants include Ameren Missouri electric account holders who are owners and managers of multifamily properties of three or more rental units with electric water heaters. This guide includes questions for the site-level property managers (SLPM) as well as corporate level property managers (CLPM).

Topic	Researchable Questions	Item
Screener		
Program Awareness and Motivation	How do participants learn about this program? Assess participant motivations for participating.	<i>Section B</i>
Participation Process	Track delivery indicators: length of time to receive the kits, the usefulness of the marketing information, how well the energy savings opportunities were understood.	<i>Section C</i>
Satisfaction with Program and Kit Items	How satisfied are participants with the program and kit items? Do participants have suggestions for improving the program?	<i>Section D</i>
Installation Rates	What are the installation rates of the various measures? How easy was the process of installing the measures?	<i>Section E</i>
Free ridership	Would the participant have purchased the product without the program?	<i>Section F</i>
Spillover	Did the Ameren program influence the participant to purchase any other energy-efficient upgrades?	<i>Section G</i>
Satisfaction with Ameren Missouri	How satisfied are participants with Ameren Missouri?	<i>Section H</i>
Demographics	Participant Demographics	<i>Section I</i>

#### Target Quota = Census of Collected Data

#### General Instructions

Interviewer instructions are in green

CATI programming/Interviewer instructions are in red

Do not read answer choices unless indicated with “[READ LIST].”

#### Variables to be Pulled into Survey

- [SLPM] = SITE LEVEL PROPERTY MANAGER
- [CLPM] = CORPORATE LEVEL PROPERTY MANAGER
- [SITE NAME]
- [SITE ADDRESS/CITY/STATE/ZIP]
- [TOTAL NUMBER OF UNITS]
- [SHOWERHEAD QTY]

- [KITCHEN FAUCET AERATOR QTY]
- [BATHROOM FAUCET AERATOR QTY]
- [LED QTY]
- [FILTER ALARM QTY]
- [HEAT PIPE QTY]
- [PROPERTY MANAGER MAILING ADDRESS]

**Back-up information, not to be programmed:**

- If respondent asks how long, say, “Approximately 20 to 30 minutes.”
- If “No – Not a convenient time,” ask if respondent would like to arrange a more convenient time for us to call them back or if you can leave a message for that person.
- If questioned about survey’s purpose: “This survey is for research purposes only and is not a marketing call. Your responses are important to Ameren Missouri.”
- If respondent has questions about the Multifamily Efficient Kits Program: “Please call Ameren Missouri customer service at (877) 215 5752.”
- If asked for contact information to authenticate survey, offer Laureen Welikson at [LWELIKSON@ameren.com](mailto:LWELIKSON@ameren.com).

## A. *Property Manager Screener*

Hello. I’m [NAME], calling on behalf of Ameren Missouri. We are talking to property managers who received energy efficiency items from Ameren Missouri. As a token of our appreciation for your time today, you will be eligible to participate in a random drawing to win a \$50 Visa gift card for completing the interview.

A1. [ASK SLPM ONLY] Our records indicate that you received energy efficiency Items from Ameren Missouri for your property at [SITE NAME]. Is this correct? [PROMPT: If further information needed give [SITE ADDRESS/CITY/STATE/ZIP]

1. Yes, I received energy efficiency items for this site
2. Yes, I received energy efficiency items for this site as well as other sites
3. No, I received energy efficiency items for a different site
4. No, I did not receive energy efficiency items from Ameren Missouri [TERMINATE]
98. (Don’t know) [TERMINATE]
99. (Refused) [TERMINATE]

A2. [IF A1=2] [IF A=3] Could you tell me the correct [address/addresses] of the [site/sites] where you received energy-saving kits?

1. [RECORD RESPONSE: \_\_\_\_\_]
98. (Don’t know) [TERMINATE]
99. (Refused) [TERMINATE]

**TERMINATE TEXT:** Thank you for your time. This survey is only for Ameren Missouri customers that received energy efficiency items.

- A3. \*Are you or any members of your household employed by Ameren Missouri?
1. Yes, I or someone in my household works for Ameren Missouri **[TERMINATE]**
  2. No, no one in my household works for Ameren Missouri

**TERMINATE TEXT:** Thank you for your time. This survey is only for Ameren Missouri customers that do not work for or have a family member that works for Ameren Missouri.

## **B. Program Awareness and Motivation**

- B1. **[ASK CLPM AND SLPM]** \*Prior to this call, were you aware that the energy efficiency items you received were provided by Ameren Missouri?

1. Yes
2. No
98. (Don't know)
99. (Refused)

- B2. **[ASK CLPM AND SLPM]** \*Where did you hear about Ameren Missouri's Multifamily Efficient Kits program? **INTERVIEWER: DO NOT READ ITEMS, PROBE TO CODE. MULTIPLE RESPONSES ALLOWED.**

1. Ameren's web site
2. Another web site (ask to please specify the website) **[SPECIFY:\_\_\_\_\_]**
3. Another property manager or co-worker
4. Ameren Missouri representative
5. Ameren Missouri Low Income Program representative
6. Social media (Facebook, Twitter)
7. Some other way (please specify) **[SPECIFY:\_\_\_\_\_]**
98. (Don't know)
99. (Refused)

- B3. **[IF B2=1,4,5]** For the following statements please tell me whether you strongly agree, somewhat agree, somewhat disagree or strongly disagree with the following statements. **[MULTIPLE OPTIONS 1=STRONGLY AGREE, 2=SOMEWHAT AGREE, 3=SOMEWHAT DISAGREE, 4=STRONGLY DISAGREE, 98=(DON'T KNOW), OR 99=(REFUSED) FOR EACH STATEMENT] [RANDOMIZE ORDER]**
1. An Ameren Missouri representative helped me order the correct number of energy efficiency items for the number of properties I manage.
  2. The benefits of participating in the program for my tenants were explained clearly.
  3. My Multifamily Efficient Kits program questions were answered sufficiently.
  98. (Don't know)
  99. (Refused)
- B4. **[ASK CLPM]** I'm going to read you four statements, please tell me which of the following statements best describes your primary reasons for participating in Ameren Missouri's Multifamily Efficient Kits program? **[READ LIST, MULTIPLE RESPONSES ALLOWED]**
1. It provides a beneficial service to my tenants
  2. It reduces energy bills for tenants
  3. It reduces maintenance costs
  4. It's good for the environment
  5. It was free
  6. None of these statements **[ASK TO SPECIFY PRIMARY REASON FOR PARTICIPATION:\_\_\_]**
  98. (Don't know)
  99. (Refused)

## C. *Participation Process*

- C1. **[ASK CLPM]** About how long did it take for you to receive your energy efficiency items after you requested them? **[READ LIST]**
1. Less than one week
  2. 1 to 2 weeks
  3. 3 to 4 weeks
  4. More than 4 weeks
  98. (Don't know)
  99. (Refused)

- C2. **[ASK CLPM]** What suggestions, if any, do you have to improve the ordering and shipping process?
1. No suggestions
  2. Please tell us your suggestions **[RECORD RESPONSE: \_\_\_\_\_]**
- C3. **[ASK CLPM AND SLPM]** Do you remember receiving informational material from Ameren Missouri to share with your tenants (e.g. tenant door hangers notifying them of the date of the upgrades and letters to send tenants before and after installing the items with information about the process)?
1. Yes, used them
  2. Yes, did not use them
  3. No
- C4. **[IF C3=1]** How helpful did you find the tenant marketing material? **[READ LIST]**
1. Very helpful
  2. Helpful
  3. Not too helpful
  4. Not useful at all helpful
  98. (Don't know)
  99. (Refused)
- C5. **[ASK CLPM AND SLPM]** What suggestions, if any, do you have to improve the tenant informational material?
1. No suggestions
  2. **[RECORD RESPONSE: \_\_\_\_\_]**
- C6. **[ASK CLPM AND SLPM]** How did you make your tenants aware of the energy efficient items provided through the Multifamily Efficient Kits Program? **INTERVIEWER: DO NOT READ ITEMS, PROBE TO CODE. MULTIPLE RESPONSES ALLOWED.**
1. Ameren Missouri Door Hanger
  2. Ameren Missouri Pre-Installation Tenant Letter
  3. Wrote my own letter to tenants
  4. Posted notice in common areas
  5. Phone calls
  6. Emails
  7. Public meetings
  8. Newsletter
  9. I didn't inform them
  10. No formal process
  98. (Don't know)
  99. (Refused)

**D. Satisfaction with Program and Kit Items**

D1. **[ASK CLPM AND SLPM]** For the following statement, please tell me whether you strongly agree, somewhat agree, agree, somewhat disagree, or strongly disagree with the following statement:

**[RECORD 1=STRONGLY AGREE, 2=SOMEWHAT AGREE, 3=AGREE, 4=SOMEWHAT DISAGREE, 5=STRONGLY DISAGREE, 98=(DON'T KNOW), OR 99=(REFUSED) FOR THE STATEMENT]**

1. "I am satisfied with my experience in the Ameren Missouri Multifamily Efficient Kits Program."

D2. **[ASK IF D1=1,2,3,4, OR 5]** Why do you **[RATING FROM D1]** with the statement?

**[RECORD RESPONSE: \_\_\_\_\_]**

D3. **[ASK CLPM AND SLPM]** \*Would you recommend Ameren Missouri's Multifamily Efficient Kits Program to other property managers?

1. Yes
2. No
98. (Don't know)
99. (Refused)

D4. **[ASK IF D3=1 OR 2]** Why?  
**[RECORD RESPONSE: \_\_\_\_\_]**

D5. **[ASK SLPM]** For each energy efficiency item, please tell me whether you were very satisfied, somewhat satisfied, not too satisfied or not at all satisfied with the energy efficiency item. **[READ LIST]**

Question	Energy Efficiency Kit Item	Very Satisfied	Somewhat Satisfied	Not Too Satisfied	Not Satisfied At All	(Don't know)
D4a.	High-efficiency showerhead					
D4b.	High-efficiency kitchen faucet aerator					
D4c.	High-efficiency bathroom faucet aerator					
D4d.	LED Light Bulbs					
D4e.	Dirty filter alarm					
D4f.	Hot water pipe insulation					

D6. Why are you **[RATING FROM D5]** with the **[INSERT ENERGY EFFICIENCY KIT ITEM D5A. TO D5F.]**? Please tell me further details about what you **[LIKE/DISLIKE]** about the energy efficiency item.  
**INTERVIEWER: DO NOT READ ITEMS, PROBE TO CODE.**

1. The item is of poor quality
2. The amount of energy savings/ utility bill savings is less than I expected
3. The item is of high quality
4. The amount of energy savings/ utility bill savings is what I expected or greater
5. Other **[SPECIFY: \_\_\_\_\_]**
98. (Don't know)
99. (Refused)

D7. **[ASK CLPM AND SLPM]** \*What suggestions, if any, do you have for improving this program?

1. No suggestions
2. **[RECORD RESPONSE: \_\_\_\_\_]**
99. (Refused)

## E. Installation Rates

By participating in the Energy Efficiency Kit Program you were sent a number of energy efficiency items including: high-efficiency showerheads, high-efficiency faucet aerators (bathroom and kitchen), ENERGY STAR® certified light emitting diode (LED) bulbs, dirty filter alarm (electric forced air heat), and electric hot water pipe insulation.

- E1. **[SLPM ONLY]** Who installed the energy efficiency items?
1. I installed the energy efficiency item
  2. An employee of mine installed the energy efficiency items
  3. I hired an outside contractor to install the energy efficiency items
  4. I left them with the tenants to install directly
  5. Other **[SPECIFY: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)
- E2. **[IF E1=2,3,4]** How did you verify the items were installed?
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  99. (Refused)
- E3. **[SLPM ONLY]** According to our tracking data, you received energy efficient items to install in **[TOTAL NUMBER OF UNITS]** units, is this correct?
1. Yes
  2. No
- E4. **[IF E1=2 or 3]** In how many total units did you install energy efficiency items?
1. **[RECORD NUMERIC RESPONSE: \_\_\_\_\_]**
- E5. **[IF E1=4]** For how many total units did you leave energy efficiency items for tenants to install?
1. **[RECORD NUMERIC RESPONSE: \_\_\_\_\_]**
- E6. **[SLPM ONLY]** Did you install all of the energy efficiency items that you received?
1. Yes
  2. No
- E7. **[IF E5=2]** How many of each item were NOT installed? **[RECORD NUMERIC RESPONSE]**

Question	Multifamily Efficient Kits Item	Record Number Left to Install	Calculate Total Number Installed
E7a	High-efficiency showerhead	_____	<b>SHOWERHEAD QTY</b>



E7b	High-efficiency kitchen faucet aerator	_____	<b>KITCHEN FAUCET AERATOR QTY</b>
E7c	High-efficiency bathroom faucet aerator	_____	<b>BATHROOM FAUCET AERATOR QTY</b>
E7d	LED Bulbs	_____	<b>LED QTY</b>
E7e	Dirty filter alarm	_____	<b>FURNACE FILTER ALARM QTY</b>
E7f	Electric hot water pipe insulation	_____	<b>HEAT PIPE QTY</b>

E8. **[FOR EACH ITEM E7a TO E7f, WHERE E7a TO E7f EQUALS LESS THAN NUMBER RECEIVED]** Why didn't you install all the **[MULTIFAMILY EFFICIENT ITEM E7a TO E7f]** you received? **READ LIST. MULTIPLE RESPONSES ALLOWED.**

1. The energy efficiency item was difficult to install
2. The energy efficiency item wasn't needed in the unit
3. I kept it and plan to install the energy efficiency item later
4. I left it for the tenants to install later
5. The tenant(s) did not want the item installed
6. None of these statements **[ASK TO SPECIFY WHY:\_\_\_]**
98. (Don't know)
99. (Refused)

E9. **[FOR EACH E8=1 , FOR EACH ITEM IDENTIFIED IN E7a TO E7f]** What was difficult about installing the **[MULTIFAMILY EFFICIENT ITEM E7a TO E7f]**? **INTERVIEWER: DO NOT READ ITEMS, PROBE TO CODE. MULTIPLE RESPONSES ALLOWED.**

1. The item is of poor quality
2. The item did not fit or could not be installed in the property
3. The property already has the item
4. We did not have the proper tools for installation
5. Other **[SPECIFY:\_\_\_\_\_]**
98. (Don't know)
99. (Refused)

E10. **[FOR EACH ITEM E7a TO E7f, WHERE E7a TO E7f EQUALS LESS THAN NUMBER RECIEVED]** What happened to the **[MULTIFAMILY EFFICIENT ITEM E7a TO E7f]** that you did not install?

1. Returned to Ameren Missouri
2. Stored the energy efficiency item
3. Gave to tenants for future use
4. Took them home
5. Threw them away
6. Other **[SPECIFY: \_\_\_\_\_]**
98. (Don't know)
99. (Refused)

E11. **[CLPM ONLY]** Did you install Ameren Missouri energy efficiency kit items at properties other than the properties listed in our tracking data? **INTERVIEWER: READ LIST OF SITE NAMES FROM TRACKING DATA IF NEEDED**

1. Yes
2. No

E12. **[IF E11=1]** Were these properties located in Ameren Missouri's service territory?

1. Yes
2. No

## **F. Free Ridership**

**[ASK QUESTIONS IN THIS SECTION OF CLPM ONLY]**

The following questions are about your decision to request energy efficiency items from Ameren Missouri.

F1. Would you have purchased and installed any of the energy efficiency items in your properties if you had not received them from Ameren Missouri?

1. Yes **[CONTINUE TO F2]**
2. No **[SKIP TO F3]**
3. I would have purchased some items, but not all **[SKIP TO F4]**
98. (Don't know)
99. (Refused)

- F2. **[IF F1=1, 98, 99]** Would you have purchased and installed the same type and number of each Energy Efficiency item in the same number of units?
1. Yes **[SKIP TO F6]**
  2. No **[SKIP TO F4]**
  98. (Don't know) **[SKIP TO F4]**
  99. (Refused) **[SKIP TO F7]**
- F3. **[IF F1 =2]** To confirm, you would not have purchased and installed any Energy Efficiency items at all, is that correct?
1. Yes, correct **[SKIP TO F7]**
  2. No **[CONTINUE TO F4]**
  98. (Don't know) **[CONTINUE TO F4]**
  99. (Refused) **[SKIP TO F7]**
- F4. I'm going to read you a list of Energy Efficiency items, please tell me, which Energy Efficiency item you would have purchased and installed in at least one unit had you not received any free items from Ameren Missouri. **[MULTIPLE RESPONSES, READ LIST]**
1. High-efficiency showerhead
  2. High-efficiency kitchen faucet aerator
  3. High-efficiency bathroom faucet aerator
  4. LED bulb
  5. Dirty filter alarm
  6. Electric hot water pipe insulation
  7. Other **[SPECIFY: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)

F5. How many of each Energy Efficiency item would you have purchased and installed had you not received any free items from Ameren Missouri. **[MARK DOWN % WOULD HAVE INSTALLED]**

Question	Multifamily Efficient Kits Item	Total Number	Estimated % Would Have Installed
<b>[IF F4=1]</b>	High-efficiency showerhead	<b>SHOWERHEAD QTY</b>	____%
<b>[IF F4=2]</b>	High-efficiency kitchen faucet aerator	<b>KITCHEN FAUCET AERATOR QTY</b>	____%
<b>[IF F4=3]</b>	High-efficiency bathroom faucet aerator	<b>BATHROOM FAUCET AERATOR QTY</b>	____%
<b>[IF F4=4]</b>	LED Bulbs	<b>LED QTY</b>	____%
<b>[IF F4=5]</b>	Dirty filter alarm	<b>FURNACE FILTER ALARM QTY</b>	____%
<b>[IF F4=6]</b>	Electric hot water pipe insulation	<b>HEAT PIPE QTY</b>	____%

F6. In terms of timing, without the receiving any free items from Ameren Missouri, when would you most likely have purchased and installed [INSERT ITEM NAME] **[READ OPTIONS, SINGLE RESPONSE FOR EACH ITEM]**

Question	Logic	Energy Efficiency Item	At the same time you received the free items	Within the same year	One to two years out	More than two years out	Never	(Don't know)
F6a.	<b>F2=1 OR F4=1</b>	High-efficiency showerhead						
F6b.	<b>F2=1 OR F4=2</b>	High-efficiency kitchen faucet aerator						
F6c.	<b>F2=1 OR F4=3</b>	High-efficiency bathroom faucet aerator						
F6d.	<b>F2=1 OR F4=4</b>	LED Bulbs						
F6e.	<b>F2=1 OR F4=5</b>	Dirty filter alarm						
F6f.	<b>F2=1 OR F4=6</b>	Electric hot water pipe insulation						

F7. Please describe in your own words the process that led you to request and install the Energy-saving items from Ameren Missouri.

1. **[RECORD RESPONSE: \_\_\_\_\_]**
98. (Don't know)
99. (Refused)

## G. Spillover

### [ASK QUESTIONS IN THIS SECTION OF CLPM AND SLPM]

- G1. Since participating in the Multifamily Efficient Kits Program, have you purchased and installed any energy-efficient upgrades at his facility that was not given to you for free or rebated by Ameren Missouri or any other organization?
1. Yes
  2. No **[SKIP TO G5]**
  98. (Don't know) **[SKIP TO G5]**
  99. (Refused)
- G2. **[IF G1 Error! Reference source not found.= YES]** What energy-efficient upgrades did you make?  
**[RECORD EQUIPMENT TYPE AND QUANTITY]**
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)
- G3. **[ASK FOR EACH ITEM FROM G2]** How did you determine whether or not the **[G2 RESPONSE]** was energy efficient?
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)
- G4. **[ASK FOR EACH ITEM FROM G2]** How important was your experience with the Multifamily Efficient Kits Program on your decision to purchase or install the **[G2 Error! Reference source not found. RESPONSE]**?
1. Not at all important
  2. Not too important
  3. Somewhat important
  4. Very important
  98. (Don't know)
  99. (Refused)

- G5. Since participating in the Multifamily Efficient Kits Program, have you undertaken energy retrofits in any other properties, *specifically in Ameren Missouri's territory*, that include energy-efficient equipment or measures that were not given to you for free or rebated by Ameren Missouri or any other organization?
1. Yes
  2. No **[SKIP TO H1]**
  3. (Don't know) **[SKIP TO H1]**
  99. (Refused)
- G6. What energy-efficient upgrades did you make in these other properties? **[RECORD EQUIPMENT TYPE AND QUANTITY]**
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)
- G7. **[ASK FOR EACH ITEM FROM G6]** How did you determine whether or not the **[G6Error! Reference source not found. RESPONSE]** was energy-efficient?
1. **[RECORD RESPONSE: \_\_\_\_\_]**
  98. (Don't know)
  99. (Refused)
- G8. **[ASK FOR EACH ITEM FROM G6]** How important was your participation in the Multifamily Efficient Kits Program in your decision to install **[G6Error! Reference source not found. RESPONSE]**? Would you say:
1. Not at all important
  2. Not too important
  3. Somewhat important
  4. Very important
  98. (Don't know)
  99. (Refused)

G9. **[ASK FOR EACH MEASURE FROM G6]** Prior to purchasing or installing the items listed below, had you heard or read about the benefits of installing this equipment from Ameren Missouri or Ameren Missouri’s Act on Energy campaign?

	Yes (1)	No (2)	Don’t know (98)
<b>[INSERT 1<sup>st</sup> RESPONSE FROM G6]</b>			
<b>[INSERT 2<sup>nd</sup> RESPONSE FROM G6]</b>			
<b>[INSERT 3<sup>rd</sup> RESPONSE FROM G6]</b>			
<b>[INSERT 4<sup>th</sup> RESPONSE FROM G6]</b>			

G10. **[ASK FOR EACH YES RESPONSE IN G9]** How important was the information Ameren Missouri provided about the energy efficiency or money saving benefits of in your decision to purchase or install the items listed below?

- 1. Not at all important
- 2. Not too important
- 3. Somewhat important
- 4. Very important
- 98. Don’t Know
- 99. (Skipped)

G11. **[ASK FOR EACH ITEM FROM G6]** What is the address of the location where you installed **[G6Error! Reference source not found. RESPONSE]**?

- 1. **[RECORD RESPONSE: \_\_\_\_\_]**
- 98. (Don’t know)
- 99. (Refused)

## H. Participant Satisfaction with Ameren Missouri

**[ASK QUESTIONS IN THIS SECTION OF CLPM AND SLPM]**

H1. \*Thinking about your overall experiences with Ameren Missouri as your utility, how satisfied would you say you are with Ameren Missouri? **[READ LIST]**

- 1. Very satisfied
- 2. Somewhat satisfied
- 3. Not too satisfied
- 4. Not satisfied at all
- 98. (Don’t know)
- 99. (Refused)

H2. **\*[IF G1=1,2,3,4]** Why are you **[ANSWER FROM H1]** with Ameren Missouri as your utility?

**[RECORD RESPONSE: \_\_\_\_\_]**

- 98. (Don't know)
- 99. (Refused)

H3. **\*Based on your experience with the Multifamily Efficient Kits Program, would you say your satisfaction with Ameren Missouri has...[READ LIST]**

- 1. Increased
- 2. Stayed about the same, or
- 3. Decreased?
- 98. (Don't know)
- 99. (Refused)

## I. *Demographics*

Now, we'd like to ask you a bit about your tenants and their units where you installed the energy efficiency items.

I1. **[SLPM ONLY]** What is the total number of people that live in the units where you installed energy efficient items?

- 1. **[RECORD RESPONSE: \_\_\_\_\_]**
- 98. (Don't know)
- 99. (Refused)

I2. **[IF I1=98]** How many people typically live in each type of unit? **[READ LIST]**

- 1. 1 Bed/ 1 Bath **[RECORD RESPONSE: \_\_\_\_\_]**
- 2. 2 Bed/ 1 Bath **[RECORD RESPONSE: \_\_\_\_\_]**
- 3. 2 Bed/ 2 Bath **[RECORD RESPONSE: \_\_\_\_\_]**
- 4. 3 Bed/ 2 Bath **[RECORD RESPONSE: \_\_\_\_\_]**
- 5. 4 Bed/ 3 Bath **[RECORD RESPONSE: \_\_\_\_\_]**
- 6. Studio **[RECORD RESPONSE: \_\_\_\_\_]**
- 98. (Don't know)
- 99. (Refused)



13. **[ASK CLPM AND SLPM]** Lastly, as a token of our appreciation, you are eligible to participate in a random drawing to win a \$50 Visa gift card. I need to confirm your address so that I may send you a \$50 Visa gift card if you win the drawing. Is your correct address, **[PROPERTY MANAGER MAILING ADDRESS]**?
1. Yes
  2. No, **[ENTER CORRECT ADDRESS: \_\_\_\_\_]**

# Appendix H1

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount		Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient			Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria				
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002583162	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003598071	Room air conditioner	1	Yes	Yes	TRUE	2	1	1	99	2	FALSE	TRUE	Look at specs on unit	TRUE	No	0	I am still planning to apply	FALSE	New sun porch added on	To save energy	TRUE	Central air conditioner	Other (please specify): High Eff gas furnace. 1 week ago	Gas	TRUE	FALSE	FALSE	
CAD003598071	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	Yes	TRUE	2	2	2	1	2	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Waiting on new heat pump to be installed	FALSE	To save energy	0	TRUE	Central air conditioner	Other (please specify): High Eff gas furnace. 1 week ago	Gas	FALSE	FALSE	FALSE	
CAD002802503	Showerhead	4	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000263192	Heat pump water heater	11	No	Don't know	FALSE	1	1	2	1	1	FALSE	TRUE	Don't know	FALSE	Don't know	0	0	FALSE	Don't know	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002554092	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	2	3	2	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000365594	Learning or "smart" thermostat	12	Yes	Yes	TRUE	99	98	3	4	4	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002669597	Learning or "smart" thermostat	12	No	No	FALSE	98	98	1	98	98	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000468433	Pool pump	3	Yes	Yes	TRUE	2	1	1	1	99	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	
CAD000457561	Room air purifier	2	Yes	Yes	TRUE	99	99	99	1	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	too small to qualify	FALSE	control allergies	To save energy	TRUE	Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE	
CAD002287899	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	1	3	99	99	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	cool gadget	cool gadget	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003602684	Room air conditioner	1	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Ductless or mini-split heat pump	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD003602684	Learning or "smart" thermostat	12	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Ductless or mini-split heat pump	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient			Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria	
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002764034	Hot water pipe insulation for your hot water heater		Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	dont have	FALSE	No	0	dont have	FALSE	dont have	dont have	FALSE	Central air conditioner	Air-source heat pump	Electric	TRUE	FALSE	FALSE	
CAD002764034	Learning or "smart" thermostat		Don't know	Yes	TRUE	2	2		2	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Air-source heat pump	Electric	TRUE	FALSE	FALSE	
CAD002217834	Learning or "smart" thermostat		Don't know	Yes	TRUE	4	4		4	4	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002727475	Room air purifier		Yes	Yes	TRUE	2	2	4	99	2	TRUE	FALSE	stated on website	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD002727475	Showerhead		Yes	Yes	TRUE	2	2	98	3	98	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD003637700	Showerhead		Yes	Yes	TRUE	3	3	2	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	Liked the style	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE	
CAD003637700	Kitchen faucet aerator		Yes	Yes	TRUE	1	3	2	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE	
CAD000266147	Learning or "smart" thermostat		No	No	FALSE	2	4	2	98	4	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003767678	Showerhead		Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD003767678	Bathroom faucet aerator		Yes	Yes	TRUE	4	4	1	4	99	FALSE	TRUE	From person who installed the faucet	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD003767678	Learning or "smart" thermostat		Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	my son	FALSE	No	0	Got my Nest in 2015, no rebate was offered then	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD002226824	Room air purifier		Yes	No	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To improve comfort	It was the cheapest product available	FALSE	Central air conditioner	Other (please specify):CentralGas	Don't know	TRUE	FALSE	FALSE	

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002559524	Room air purifier	2	Don't know	Yes	TRUE	2	98	2	99	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Yes	Don't know	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002559524	Bathroom faucet aerator	6	Don't know	Yes	TRUE	1	99	2	2	99	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002559524	Learning or "smart" thermostat	12	Don't know	Yes	TRUE	2	98	2	98	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I am still planning to apply	FALSE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002682870	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	99	99	99	99	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002357416	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	4	2	98	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wanted a different model that did	FALSE	Was ready to update	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002636733	Kitchen faucet aerator	5	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Other (please specify):Central heat, gasGas	Electric	TRUE	FALSE	FALSE
CAD002636733	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	1	98	98	1	98	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Other (please specify):Central heat, gasGas	Electric	TRUE	FALSE	FALSE
CAD002636733	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	Yes	TRUE	1	98	1	1	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Other (please specify):Central heat, gasGas	Electric	FALSE	FALSE	FALSE
CAD003391862	Showerhead	4	Yes	Yes	TRUE	4	4	4	4	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wanted a different model that did	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD003391862	Kitchen faucet aerator	5	Yes	Yes	TRUE	4	4	4	4	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wanted a different model that did	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD003391862	Bathroom faucet aerator	6	Yes	Yes	TRUE	4	2	4	3	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wanted a different model that did	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount				Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient			Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure				Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria	
Cadmus Account Key	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002630183	Heat pump water heater Learning or "smart" thermostat	11	Yes	No	TRUE	1	2	2	2	1	FALSE	TRUE	IT's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003472765	Learning or "smart" thermostat	12	No	Yes	TRUE	99	2	4	2	99	TRUE	FALSE	IT's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002582220	Room air purifier Learning or "smart" thermostat	2	No	No	FALSE	1	1	1	99	1	FALSE	TRUE	IT's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	To save money	TRUE	Central air conditioner	Air-source heat pump	Gas	TRUE	FALSE	FALSE	
CAD002582220	thermostat	12	No	No	FALSE	2	3	1	2	1	FALSE	TRUE	IT's ENERGY STAR-	TRUE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Air-source heat pump	Gas	TRUE	FALSE	FALSE	
CAD003644107	Learning or "smart" thermostat	12	Don't know	Yes	TRUE	4	4	3	99	99	FALSE	FALSE	IT's ENERGY STAR-	TRUE	No	0	Lost purchase receipt	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000126018	Kitchen faucet aerator	5	Don't know	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	IT's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000126018	Bathroom faucet aerator	6	Don't know	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	IT's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000049729	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	99	1	99	99	FALSE	TRUE	IT's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002695246	Showerhead	4	No	No	FALSE	1	2	2	2	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To improve comfort	Liked the style	FALSE	Central air conditioner	Don't know Electric	Electric	TRUE	FALSE	FALSE	
CAD002188669	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	3	4	4	99	FALSE	FALSE	IT's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002275123	Learning or "smart" thermostat	12	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Yes	Don't know	0	FALSE	Convenience	Gifted to me	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002405365	Showerhead	4	Yes	Yes	TRUE	2	99	2	99	2	TRUE	FALSE	IT's ENERGY STAR-certified	TRUE	No	0	I wanted a different model that did	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD003513543	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	3	2	99	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Included with the home security system	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002654763	Room air purifier	2	Yes	Yes	TRUE	1	3	2	2	1	FALSE	TRUE	IT's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE	

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient			Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002654763	Showerhead	4	Yes	Yes	TRUE	1	2	1	1	2	FALSE	TRUE	The retailer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002654763	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	1	2	2	3	2	FALSE	TRUE	The retailer/contractor told me it was	TRUE	No	0	Just forgot about it	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE
CAD000136744	Room air purifier	2	Don't know	Yes	TRUE	1	1	98	1	2	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To improve comfort	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002276984	Showerhead	4	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Don't know	FALSE	No	0	I wasn't sure my equipment qualified	TRUE	Liked the style	Liked the style	FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	Electric	TRUE	FALSE	FALSE
CAD002276984	Kitchen faucet aerator	5	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Don't know	FALSE	No	0	I wasn't sure my equipment qualified	TRUE	Don't know	It had other features that I liked	FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	Electric	TRUE	FALSE	FALSE
CAD002276984	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	The retailer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	Electric	TRUE	FALSE	FALSE
CAD002749119	Room air purifier	2	Yes	Yes	TRUE	2	1	2	2	3	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Don't know	0	FALSE	To improve comfort	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002749119	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	2	3	2	1	3	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE
CAD003665641	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002816937	Learning or "smart" thermostat	12	No	No	FALSE	2	2	1	2	2	FALSE	TRUE	The retailer/contractor told me it was	TRUE	Don't know	0	0	FALSE	To save money	0	TRUE	Don't know	Don't know	Don't know	TRUE	FALSE	FALSE
CAD002666443	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	4	1	2	98	FALSE	TRUE	Don't know	FALSE	No	0	I wanted a different model that did not qualify	FALSE	Convenience of being able to control with my phone and program a schedule for each day	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002299382	Room air conditioner	1	Yes	Yes	TRUE	3	3	3	4	3	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save money	0	TRUE	Window or wall air conditioner	Other (please specify):Space heaters electric	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount				Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure		Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002641014	Heat pump water heater	11	Yes	Yes	TRUE	2	3	99	99	99	TRUE	FALSE	The retailer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Electric furnace	Gas	FALSE	FALSE	FALSE
CAD003792114	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	4	99	99	2	TRUE	FALSE	Its on the rebate list	TRUE	Don't know	0	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002643507	Kitchen faucet aerator	5	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	Needed to replace anyway	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002643507	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	2	98	99	2	2	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	TRUE	FALSE
CAD003362428	Learning or "smart" thermostat	12	No	No	FALSE	1	2	1	1	1	FALSE	TRUE	The retailer/contractor told me it was	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000411372	Showerhead	4	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003406377	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	2	1	98	98	98	FALSE	TRUE	The retailer/contractor told me it was	TRUE	Don't know	0	0	FALSE	Was ready to update	contractor installed	FALSE	Central air conditioner Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD003406377	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	1	98	98	98	FALSE	TRUE	The retailer/contractor told me it was	TRUE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD003621765	Learning or "smart" thermostat	12	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	My heat is turned off when I'm gone more than	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000470011	Room air purifier	2	Yes	No	TRUE	2	98	2	2	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002746360	Heat pump water heater	11	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	added nathroom needed to upgrade size	To save money	TRUE	Other (please specify): tankless water	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002406125	Learning or "smart" thermostat	12	No	Yes	TRUE	98	4	4	98	98	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002716064	Bathroom faucet aerator	6	Yes	Yes	TRUE	98	99	98	99	98	FALSE	FALSE	The retailer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient			Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD000218066	Heat pump water heater	11	Yes	Yes	TRUE	1	3	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	I am still planning to apply	FALSE	To replace failing equipment	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003662961	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002697161	Pool pump	3	Yes	Yes	TRUE	1	2	98	2	98	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	Don't know	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	
CAD003654940	Learning or "smart" thermostat	12	No	Yes	TRUE	2	3	2	1	4	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000418661	Kitchen faucet aerator	5	Yes	No	TRUE	2	4	2	2	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Portable air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE
CAD002712011	Room air purifier	2	Yes	Yes	TRUE	4	4	4	98	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	Don't know	0	0	FALSE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Electric baseboard heating	Gas	TRUE	FALSE	FALSE
CAD002451805	Pool pump	3	Yes	Yes	TRUE	4	4	98	99	4	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To replace failing equipment	Don't know	FALSE	Central air conditioner	Electric furnace	Don't know	TRUE	FALSE	FALSE	
CAD002451805	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	99	98	4	98	FALSE	FALSE	It's ENERGY STAR-	TRUE	Yes	Don't know	0	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace	Don't know	TRUE	FALSE	FALSE	
CAD003700034	Learning or "smart" thermostat	12	No	Yes	TRUE	2	98	2	1	98	FALSE	TRUE	Don't know	FALSE	No	0	Just forgot about it	TRUE	To save money	0	TRUE	Central air conditioner	Ductless or mini-split heat pump	Air-source heat pump	Gas	TRUE	FALSE	FALSE
CAD002594683	Room air conditioner	1	Yes	Yes	TRUE	98	98	98	2	98	TRUE	FALSE	Don't know	FALSE	No	0	I applied, but I did not receive a rebate	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD000064799	Heat pump water heater	11	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Other (please specify): wood stove	Gas	FALSE	FALSE	FALSE
CAD000049052	Room air conditioner	1	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	It was the cheapest product available	FALSE	Central air conditioner	Window or wall air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002363402	Room air purifier	2	No	No	FALSE	99	4	2	4	4	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	



Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002363402	Learning or "smart" thermostat	12	No	No	FALSE	4	4	1	4	99	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002384242	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	Yes	TRUE	1	99	2	99	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't own property	FALSE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000372655	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	99	1	1	1	FALSE	TRUE	Don't know	FALSE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002199101	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	4	2	3	3	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Don't know	FALSE	FALSE	FALSE	
CAD000104833	Learning or "smart" thermostat	12	No	Yes	TRUE	2	4	4	4	4	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	Liked the style	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Gas	TRUE	FALSE	FALSE	
CAD002616954	Showerhead	4	No	No	FALSE	2	2	3	3	2	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To replace failing equipment	To save money	TRUE	Window or wall air conditioner	Electric baseboard heating system	Electric	TRUE	FALSE	FALSE	
CAD002616954	Kitchen faucet aerator	5	No	No	FALSE	2	1	99	4	3	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Window or wall air conditioner	Electric baseboard heating system	Electric	TRUE	FALSE	FALSE	
CAD003720290	Heat pump water heater	11	Yes	Yes	TRUE	1	3	1	2	2	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Yes	Don't know	0	FALSE	To save energy	0	TRUE	Central air conditioner	Portable air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000205380	Showerhead	4	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	common sense	FALSE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD000205380	Kitchen faucet aerator	5	Yes	Yes	TRUE	1	1	1	2	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	TRUE	
CAD000205380	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	common sense	FALSE	No	0	I wasn't sure my equipment qualified	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD002603785	Learning or "smart" thermostat	12	Don't know	Yes	TRUE	2	98	1	99	99	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002608437	Learning or "smart" thermostat	12	Don't know	Don't know	FALSE	4	4	3	4	4	FALSE	FALSE	research	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003417488	Room air conditioner	1	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	IT's ENERGY STAR-certified	TRUE	Yes	No	Just forgot about it	TRUE	Was ready to update	Liked the style	FALSE	Ground-source heat pump	Ground-source or geothermal heat pump	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD003417488	Room air purifier	2	Yes	Yes	TRUE	3	2	4	98	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Just forgot about it	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Air-source heat pump	Ground-source or geothermal heat pump	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD002551851	Room air purifier	2	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	0	TRUE	To improve comfort	Don't know	FALSE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD000237084	Furnace fan with ECM (Electronically Commutated Motor)	9	No	Yes	TRUE	4	2	2	99	1	FALSE	TRUE	IT's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003644290	Showerhead	4	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	IT's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	To save energy	TRUE	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD002283814	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	4	2	4	4	TRUE	FALSE	IT's ENERGY STAR-	TRUE	No	0	Gifted without a receipt	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD002376884	Showerhead	4	No	Don't know	FALSE	1	1	2	98	1	FALSE	TRUE	Don't know	FALSE	Don't know	0	0	FALSE	The management of society changed it	To save energy	FALSE	Central air conditioner	Don't know	Electric	Electric	TRUE	FALSE	FALSE
CAD002376884	Kitchen faucet aerator	5	No	Don't know	FALSE	1	1	2	1	1	FALSE	TRUE	Don't know	FALSE	Don't know	0	0	FALSE	The management of society changed it	To save energy	FALSE	Central air conditioner	Don't know	Electric	Electric	TRUE	FALSE	FALSE
CAD002376884	Bathroom faucet aerator	6	No	Don't know	FALSE	2	1	1	1	1	FALSE	TRUE	Don't know	FALSE	Don't know	0	0	FALSE	The management of society changed for society	To save energy	FALSE	Central air conditioner	Don't know	Electric	Electric	TRUE	FALSE	FALSE
CAD000043596	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	4	99	99	99	FALSE	FALSE	IT's ENERGY STAR-	TRUE	Yes	Don't know	0	FALSE	Was ready to update	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003738060	Room air conditioner	1	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD003738060	Room air purifier	2	Yes	Yes	TRUE	2	3	4	4	3	TRUE	FALSE	IT's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	

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CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003738060	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	3	3	3	3	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD000278462	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	3	4	3	4	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002356832	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	No	TRUE	3	2	2	2	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	Needed to replace anyway	Liked the style	FALSE	Ductless or mini-split heat pump Air-source heat pump Window or wall air conditioner	Gas furnace/boiler Electric baseboard heating	Gas	FALSE	FALSE	FALSE
CAD002356832	Filter whistle	10	Yes	No	TRUE	1	1	1	2	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	I am still planning to apply	FALSE	To save energy	0	TRUE	Ductless or mini-split heat pump Air-source heat pump Window or wall air conditioner	Gas furnace/boiler Electric baseboard heating	Gas	FALSE	FALSE	FALSE
CAD002356832	Heat pump water heater	11	Yes	No	TRUE	2	2	1	2	2	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	To save money	0	TRUE	Ductless or mini-split heat pump Air-source heat pump Window or wall air conditioner	Gas furnace/boiler Electric baseboard heating	Gas	FALSE	FALSE	FALSE
CAD002272041	Showerhead	4	No	No	FALSE	2	98	2	99	98	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	To save money	TRUE	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002649948	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	2	4	2	3	4	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I applied, but I did not receive a rebate	FALSE	To replace failing equipment	It had other features that I liked	FALSE	Central air conditioner Air-source heat pump	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003515316	Room air purifier	2	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE

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CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000094846	Showerhead		4 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Came from Ameren.	FALSE	To replace failing equipment	Came from Ameren.	FALSE	Air-source heat pump/Portable air conditioner	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000094846	Kitchen faucet aerator		5 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	To replace failing equipment	It had other features that I liked	FALSE	Air-source heat pump/Portable air conditioner	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000094846	Bathroom faucet aerator		6 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Air-source heat pump/Portable air conditioner	Air-source heat pump Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003597429	Showerhead		4 Yes	Yes	TRUE	2	2	98	99	99	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To replace failing equipment	It had other features that I liked	FALSE	Central air conditioner	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD002747574	Showerhead		4 Don't know	No	FALSE	1	3	2	3	3	FALSE	TRUE	a water saver head	TRUE	No	0	0	TRUE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002594245	Learning or "smart" thermostat		12 Yes	Yes	TRUE	1	3	2	1	1	FALSE	TRUE	your website	TRUE	Yes	Yes	0	FALSE	Was ready to update	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002422048	Learning or "smart" thermostat		12 No	Yes	TRUE	1	2	1	2	2	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Don't know	0	0	FALSE	Was ready to update	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002650984	Learning or "smart" thermostat		12 Yes	Yes	TRUE	2	2	98	98	2	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002211003	Heat pump water heater		11 Yes	Don't know	TRUE	3	3	3	3	3	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	It was the only option available	FALSE	Air-source heat pump/Ground-source or geothermal heat pump	Air-source heat pump Ground-source or geothermal	Gas	FALSE	FALSE	FALSE
CAD002211003	Learning or "smart" thermostat		12 Yes	Don't know	TRUE	3	3	3	3	3	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	It was the only option available	FALSE	Air-source heat pump/Ground-source or geothermal heat pump	Air-source heat pump Ground-source or geothermal	Gas	TRUE	FALSE	FALSE
CAD002510961	Showerhead		4 No	No	FALSE	2	3	2	99	2	TRUE	FALSE	web	TRUE	No	0	0	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE

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CAD003761896	Room air purifier		2	No	Yes	TRUE	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	installed in furnace	FALSE	whole house	clean air	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	
CAD003761896	Furnace fan with ECM (Electronically Commutated Motor)		9	No	Yes	TRUE	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000291019	Room air conditioner		1	Don't know	No	FALSE	4	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To improve comfort	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	
CAD000408637	Learning or "smart" thermostat		12	Yes	Yes	TRUE	4	2	4	3	4	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002662787	Learning or "smart" thermostat		12	Yes	Yes	TRUE	2	98	98	98	TRUE	FALSE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	Was ready to update	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002685856	Room air conditioner		1	No	No	FALSE	1	99	2	98	2	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To improve comfort	It was the only option available	FALSE	Window or wall air conditioner	Electric heaterGas	Gas	TRUE	FALSE	FALSE
CAD002582547	Room air conditioner		1	No	Don't know	FALSE	98	98	98	98	FALSE	FALSE	Don't know	FALSE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Window or wall air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002515565	Furnace fan with ECM (Electronically Commutated Motor)		9	Yes	Yes	TRUE	3	2	99	99	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I am still planning to apply	To replace failing equipment	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000458533	Learning or "smart" thermostat		12	Yes	Yes	TRUE	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Other (please specify): propaneGas	Electric	FALSE	FALSE	FALSE	
CAD003513673	Room air purifier		2	Yes	Yes	TRUE	1	2	2	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Don't know	0	FALSE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD003674356	Learning or "smart" thermostat		12	Don't know	Yes	TRUE	1	1	1	2	2	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002414770	Room air purifier		2	No	No	FALSE	98	98	98	99	98	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD003617699	Showerhead		4	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	Don't know	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD003617699	Bathroom faucet aerator		6	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Don't know	FALSE	No	0	It was confusing	To replace failing equipment	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	

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CAD003617699	Furnace fan with ECM (Electronically Commutated Motor)		9 Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	222	FALSE	No	0	contractor not "certified" by ameren. He said it's too expensive to be certified and purchase their specific equipment	FALSE	Don't know	222	FALSE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD003382984	Learning or "smart" thermostat		12 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Didn't know about the rebate.	TRUE	New install by contractor	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002640016	Furnace fan with ECM (Electronically Commutated Motor)		9 Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	It was the only option available	FALSE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002592153	Learning or "smart" thermostat		12 Yes	Yes	TRUE	98	2	1	98	98	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Just forgot about it	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Electric baseboard heating system	Electric	TRUE	FALSE	FALSE
CAD002320314	Showerhead		4 Yes	Yes	TRUE	4	98	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002320314	Hot water pipe insulation for your hot water heater		7 Yes	Yes	TRUE	99	4	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002320314	Learning or "smart" thermostat		12 Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	already installed	To save energy	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003638263	Learning or "smart" thermostat		12 Yes	Yes	TRUE	4	1	1	1	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	Was ready to update	Liked the style	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002679912	Showerhead		4 Don't know	No	FALSE	3	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To replace failing equipment	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000274567	Room air conditioner		1 No	No	FALSE	2	2	1	3	2	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To improve comfort	To save money	TRUE	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002414106	Learning or "smart" thermostat	12	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002418923	Room air purifier	2	No	No	FALSE	1	1	1	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To improve comfort	Health	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002418923	Learning or "smart" thermostat	12	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD003729887	Room air purifier	2	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Don't know	TRUE	FALSE	FALSE
CAD002357394	Bathroom faucet aerator	6	No	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To replace failing equipment	To save money	TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump Other (please specify):WOOD	Electric	TRUE	FALSE	FALSE
CAD002357394	Hot water pipe insulation for your hot water heater	7	No	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	FALSE	No	0	0	TRUE	To save energy	0	TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump Other (please specify):WOOD	Electric	TRUE	FALSE	FALSE
CAD002438577	Showerhead	4	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	Needed to replace anyway	Don't know	FALSE	Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD002438577	Kitchen faucet aerator	5	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	Needed to replace anyway	needed to replace	FALSE	Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD002438577	Bathroom faucet aerator	6	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To replace failing equipment	needed to replace them	FALSE	Air-source heat pump	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD003621601	Learning or "smart" thermostat	12	No	Yes	TRUE	1	2	1	4	4	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000277230	Pool pump	3	No	Yes	TRUE	2	2	1	2	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	Needed to replace anyway	To save energy	TRUE	Window or wall air conditioner	Other (please specify):Electric boilerElectric	Electric	TRUE	FALSE	TRUE
CAD000277230	Bathroom faucet aerator	6	No	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To improve comfort	Liked the style	FALSE	Window or wall air conditioner	Other (please specify):Electric boilerElectric	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount				Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002552140	Learning or "smart" thermostat	12	No	No	FALSE	99	99	98	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	Liked the style	FALSE	Don't know	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003464403	Heat pump water heater	11	Yes	Yes	TRUE	2	2	1	3	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	building new house	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD003600337	Showerhead	4	Yes	Yes	TRUE	4	4	4	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD003600337	Bathroom faucet aerator	6	Yes	Yes	TRUE	4	99	4	4	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	Was ready to update	Liked the style	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002818110	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	2	1	2	2	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD000223555	Furnace fan with ECM (Electronically Commutated Motor)	9	No	No	FALSE	1	4	4	4	4	FALSE	TRUE	Don't know	FALSE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002733200	Room air purifier	2	Yes	Yes	TRUE	1	1	99	98	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	0	FALSE	I just applies a few days ago. waiting to receive checks	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Gas	TRUE	FALSE	FALSE
CAD002229910	Learning or "smart" thermostat	12	Yes	No	TRUE	98	98	98	99	2	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Don't know	FALSE	FALSE	FALSE
CAD000309256	Learning or "smart" thermostat	12	No	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	Don't know	0	FALSE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Don't knowGas	Gas	FALSE	FALSE	FALSE
CAD000199191	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	Don't know	0	0	FALSE	the old one went out	Landlord did	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000199191	Heat pump water heater	11	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	landlord did it	FALSE	Don't know	0	0	FALSE	old one went out	landlord	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000199191	Learning or "smart" thermostat	12	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	landlord did it	FALSE	Don't know	0	0	FALSE	To replace failing equipment	landlord did it	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002193654	Room air conditioner	1	No	Yes	TRUE	98	3	98	2	2	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To replace failing equipment	It was the cheapest product available	FALSE	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE



Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount				Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria	
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003652205	Hot water pipe insulation for your hot water heater		7 No	Yes	TRUE	1	4	99	99	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	It was confusing	TRUE	Energy conservation & so pipes don't freeze	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	TRUE
CAD000099117	Showerhead		4 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000099117	Bathroom faucet aerator		6 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000099117	Hot water pipe insulation for your hot water heater		7 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002747558	Learning or "smart" thermostat		12 Yes	No	TRUE	2	2	4	3	3	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I am still planning to apply	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002791536	Learning or "smart" thermostat		12 Don't know	Yes	TRUE	2	3	2	3	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Other (please specify): Central unit Gas	Gas	FALSE	FALSE	FALSE
CAD000458378	Showerhead		4 No	No	FALSE	98	98	98	98	98	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To replace failing equipment	redone bathroom	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002804424	Showerhead		4 Yes	Yes	TRUE	1	2	2	1	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	was not aware of rebate	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	TRUE
CAD002804424	Kitchen faucet aerator		5 Yes	Yes	TRUE	1	2	2	98	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	was not aware of rebate	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	TRUE
CAD002804424	Learning or "smart" thermostat		12 Yes	Yes	TRUE	1	1	2	1	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	I have applied waiting for rebate	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD002688404	Showerhead		4 Yes	Don't know	TRUE	2	3	3	2	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	Needed to replace anyway	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria		
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002497304	Showerhead		4 Yes	No	TRUE	2	2	2	1	2	FALSE	TRUE	Don't know	FALSE	No		Don't know	FALSE	Was ready to update	Liked the style	FALSE	Central air conditioner	Electric furnace Other (please specify):Fuel oil	Electric	TRUE	FALSE	FALSE	
CAD002497304	Bathroom faucet aerator		6 Yes	No	TRUE	1	3	1	2	2	FALSE	TRUE	Don't know	FALSE	No		Don't know	FALSE	Don't know	Don't know	FALSE	Central air conditioner	Electric furnace Other (please specify):Fuel oil	Electric	TRUE	FALSE	FALSE	
CAD002196388	Room air conditioner		1 Yes	Yes	TRUE	2	1	2	2	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No		I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	TRUE	
CAD002196388	Kitchen faucet aerator		5 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Packaging Package information	TRUE	No		Don't know	FALSE	To save money	0	TRUE	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD002196388	Bathroom faucet aerator		6 Yes	Yes	TRUE	1	99	2	2	99	FALSE	TRUE		TRUE	No		Don't know	FALSE	Needed to replace anyway	To save money	TRUE	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD002274178	Room air purifier		2 No	No	FALSE	98	1	99	98	98	FALSE	TRUE	It's ENERGY STAR-	TRUE	No		0	TRUE	To improve comfort	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE	
CAD002429895	Heat pump water heater		11 No	No	FALSE	3	3	3	3	3	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Don't know		0	FALSE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD002429895	Learning or "smart" thermostat		12 No	No	FALSE	3	3	3	3	3	FALSE	FALSE	It's ENERGY STAR-	TRUE	Don't know		0	FALSE	To replace failing equipment	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000346401	Room air conditioner		1 No	No	FALSE	3	99	99	99	3	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No		0	TRUE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD000346401	Learning or "smart" thermostat		12 No	No	FALSE	3	99	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No		0	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000056767	Learning or "smart" thermostat		12 Yes	Yes	TRUE	1	2	1	99	99	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No		0	TRUE	Needed to replace anyway	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000048425	Room air conditioner		1 Yes	No	TRUE	1	3	99	99	98	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	No duct work for central air	To save energy	TRUE	Window or wall air conditioner	Electric baseboard heating system Other (please specify): Window energy efficient air/heat unit Electric	Electric	TRUE	FALSE	FALSE
CAD000048425	Heat pump water heater		11 Yes	No	TRUE	2	2	99	2	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Installed ourselves	TRUE	To replace failing equipment	To save money	TRUE	Window or wall air conditioner	Electric baseboard heating system Other (please specify): Window energy efficient air/heat unit Electric	Electric	TRUE	TRUE	FALSE
CAD002317968	Learning or "smart" thermostat		12 Yes	Yes	TRUE	98	1	1	98	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To save energy	0	TRUE	Central air conditioner	Electric baseboard heating	Electric	TRUE	FALSE	FALSE
CAD002536264	Learning or "smart" thermostat		12 Yes	Yes	TRUE	2	3	2	4	99	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To save energy	0	TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	Gas	TRUE	FALSE	FALSE
CAD002720136	Room air purifier		2 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	Allergies	Allergies	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002720136	Learning or "smart" thermostat		12 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To replace failing equipment	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002617249	Pool pump		3 No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To replace failing equipment	Don't know	FALSE	Central air conditioner	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD002617249	Learning or "smart" thermostat		12 No	Yes	TRUE	99	99	99	2	99	TRUE	FALSE	Don't know	FALSE	No	0	you did not list my model	FALSE	To improve comfort	included in home upgrade	FALSE	Central air conditioner	Air-source heat pump	Electric	TRUE	FALSE	FALSE
CAD000207903	Learning or "smart" thermostat		12 No	Yes	TRUE	4	4	4	2	4	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	Liked the style	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD000086425	Pool pump		3 No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No	0	Don't know	FALSE	To replace failing equipment	It was the only option available	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000086425	Bathroom faucet aerator		6 No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	Needed to replace anyway	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000086425	Learning or "smart" thermostat		12 No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	To save money	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria	
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002538212	Showerhead		4 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-	TRUE	No		Installed myself	TRUE	Needed to replace anyway	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000261904	Learning or "smart" thermostat		12 No	Yes	TRUE	3	3		2	3	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No		I wasn't sure my equipment qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002388519	Room air purifier		2 Yes	Yes	TRUE	99	99	99	1	99	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes		FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002620392	Learning or "smart" thermostat		12 Yes	Yes	TRUE	2	4	3	3	4	TRUE	FALSE	It's ENERGY STAR-	TRUE	No		Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002183369	Pool pump		3 Yes	Yes	TRUE	4	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No		I wasn't sure my equipment qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002337775	Learning or "smart" thermostat		12 Yes	Yes	TRUE	98	98	4	98	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No		I wasn't sure my equipment qualified	TRUE	To replace failing equipment	Don't know	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002486299	Learning or "smart" thermostat		12 Don't know	No	FALSE	2	99	3	99	2	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No			FALSE	To replace failing equipment	To save energy	TRUE	Window or wall air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002511825	Showerhead		4 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No		I wasn't sure my equipment qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002511825	Learning or "smart" thermostat		12 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Ameren web site	TRUE	Don't know			FALSE	Ameren Rebate	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE
CAD003845419	Room air conditioner		1 Yes	Yes	TRUE	2	2	2	99	99	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	Yes		FALSE	To save energy		TRUE	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002253667	Showerhead		4 Don't know	No	FALSE	3	3	3	3	3	FALSE	FALSE	It's ENERGY STAR-	TRUE	No			TRUE	Was ready to update	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000240072	Furnace fan with ECM (Electronically Commutated Motor)		9 Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	published reports	TRUE	Don't know			FALSE	To replace failing equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002758337	Showerhead		4 No	No	FALSE	4	4	4	99	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No			TRUE	Needed to replace anyway	It was the only option available	FALSE	Central air conditioner	Electric furnace Other (please specify):electric portable heater	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount				Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria		
Cadmus Account Key	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000313390	Learning or "smart" thermostat	12	Yes	No	TRUE	1	99	99	99	99	FALSE	TRUE	Don't know	FALSE	No	0	Did not know	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002500788	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	3	3	3	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Don't know	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD003780581	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	1	99	99	99	99	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To replace failing equipment	To save energy	TRUE	Window or wall air conditioner Other (please specify)-baseboard hardwire heaters	Electric baseboard heating system	Electric	TRUE	FALSE	TRUE
CAD003729140	Room air conditioner	1	Yes	Yes	TRUE	2	3	3	2	2	TRUE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To replace failing equipment	To save money	TRUE	Window or wall air conditioner	Electric baseboard heating	Electric	TRUE	TRUE	FALSE
CAD003785592	Room air purifier	2	Yes	Yes	TRUE	1	3	2	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD000167699	Room air conditioner	1	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000167699	Showerhead	4	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000167699	Learning or "smart" thermostat	12	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD000325799	Room air purifier	2	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Yes	No	I wasn't sure my equipment qualified	TRUE	Was ready to update	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	TRUE
CAD000325799	Pool pump	3	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	I am still planning to apply	FALSE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD000146043	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	2	99	3	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I applied, but I did not receive a rebate	FALSE	Was a gift for Skelator. He likes electronics.	Liked the style	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002594802	Learning or "smart" thermostat	12	Yes	Yes	TRUE	99	99	4	99	99	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	Just forgot about it	TRUE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002526163	Room air purifier	2	Yes	Yes	TRUE	2	2	2	2	1	FALSE	TRUE	Don't know	FALSE	No	0	I wasn't sure my equipment qualified	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002526163	Filter whistle	10	Yes	Yes	TRUE	2	3	2	2	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	Yes	No	Just forgot about it	TRUE	Needed to replace anyway	To save money	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002608906	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	It was confusing	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002719020	Room air purifier	2	No	No	FALSE	2	2	2	99	2	TRUE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler Electric baseboard heating	Gas	TRUE	FALSE	FALSE
CAD002191038	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	3	1	1	3	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Yes	Yes	0	FALSE	To save money	0	TRUE	Don't know	Don't know Electric furnace Other (please specify):wood	Don't know	TRUE	FALSE	FALSE
CAD000394675	Showerhead	4	Yes	Yes	TRUE	1	2	2	98	2	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace Other (please specify):wood	Electric	TRUE	FALSE	FALSE
CAD000394675	Kitchen faucet aerator	5	Yes	Yes	TRUE	1	3	2	2	3	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace Other (please specify):wood	Electric	TRUE	FALSE	FALSE
CAD000394675	Bathroom faucet aerator	6	Yes	Yes	TRUE	2	1	2	98	2	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	No	0	Don't know	FALSE	To save money	0	TRUE	Central air conditioner	Electric furnace Other (please specify):wood	Electric	TRUE	FALSE	FALSE
CAD002437806	Pool pump	3	Yes	Yes	TRUE	2	1	2	2	99	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD000483274	Showerhead	4	Don't know	Yes	TRUE	2	3	3	99	3	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	Just forgot about it	TRUE	Was ready to update	To save money	TRUE	Air-source heat pump	Air-source heat pump	Electric	TRUE	TRUE	FALSE
CAD000483274	Kitchen faucet aerator	5	Don't know	Yes	TRUE	2	4	2	4	3	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Air-source heat pump	Air-source heat pump	Electric	TRUE	TRUE	FALSE
CAD000483274	Hot water pipe insulation for your hot water heater	7	Don't know	Yes	TRUE	2	4	4	4	98	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	To save energy	0	TRUE	Air-source heat pump	Air-source heat pump	Electric	TRUE	TRUE	FALSE
CAD003826739	Heat pump water heater	11	Yes	Yes	TRUE	2	3	2	4	3	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	No	Just forgot about it	TRUE	Was ready to update	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD003393970	Showerhead	4	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Liked the style	Liked the style	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria					
Cadmus Account Key	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)		
CAD003393970	Learning or "smart" thermostat	12	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	Landlord installed	FALSE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE		
CAD000204371	Learning or "smart" thermostat	12	Don't know	Yes	TRUE	3	2	2	99	99	TRUE	FALSE	The retailer/contractor told me it was	TRUE	No	0	I am still planning to apply	FALSE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE		
CAD003751160	Furnace fan with ECM (Electronically Commutated Motor)	9	Don't know	Yes	TRUE	1	2	2	1	1	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	Don't know	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Gas	TRUE	FALSE	FALSE		
CAD000029908	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	99	99	99	99	FALSE	TRUE	The retailer/contractor told me it was	TRUE	No	0	I wasn't sure my equipment qualified	TRUE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE		
CAD002504438	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	4	2	2	99	TRUE	FALSE	Features and watching my bill afterwards	TRUE	Yes	Yes	0	FALSE	To replace failing equipment	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE		
CAD000180851	Hot water pipe insulation for your hot water heater	7	No	No	FALSE	2	99	1	99	99	FALSE	TRUE	The retailer/contractor told me it was	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE		
CAD000180851	Learning or "smart" thermostat	12	No	No	FALSE	3	99	1	2	99	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE		
CAD000408343	Learning or "smart" thermostat	12	Yes	Yes	TRUE	98	98	4	98	98	FALSE	FALSE	Don't know	FALSE	Don't know	0	0	FALSE	Needed to replace anyway	It was the only option available	FALSE	Central air conditioner	Portable air conditioner	Window or wall air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002507006	Showerhead	4	Yes	Yes	TRUE	2	2	4	2	98	TRUE	FALSE	sent by mail	FALSE	Don't know	0	0	FALSE	Needed to replace anyway	sent by mail	FALSE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE		
CAD002507006	Furnace fan with ECM (Electronically Commutated Motor)	9	Yes	Yes	TRUE	1	99	2	2	98	FALSE	TRUE	It's ENERGY STAR-certified	TRUE	No	0	Don't know	FALSE	Don't know	Don't know	FALSE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE		
CAD002507006	Learning or "smart" thermostat	12	Yes	Yes	TRUE	2	3	98	3	98	TRUE	FALSE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Electric	FALSE	FALSE	FALSE		

Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings				Meeting all criteria			
CadmusAccountKey	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002754219	Learning or "smart" thermostat	12	Yes	Yes	TRUE	3	99	2	99	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	Don't know	0	0	FALSE	Was ready to update	It had other features that I liked	FALSE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD002573726	Room air conditioner	1	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002239058	Room air purifier	2	Don't know	No	FALSE	2	2	2	99	99	TRUE	FALSE	It's ENERGY STAR-	TRUE	Don't know	0	0	FALSE	To improve comfort	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD002239058	Showerhead	4	Don't know	No	FALSE	2	2	2	99	99	TRUE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	Needed to replace anyway	It had other features that I liked	FALSE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE	
CAD000112760	Learning or "smart" thermostat	12	No	Don't know	FALSE	4	1	2	3	4	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Don't know	Gas	Gas	FALSE	FALSE	FALSE
CAD003542392	Showerhead	4	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To improve comfort	To save money	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD003542392	Bathroom faucet aerator	6	No	No	FALSE	3	3	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To replace failing equipment	To save money	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE
CAD002261164	Learning or "smart" thermostat	12	Yes	Yes	TRUE	1	2	3	4	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	FALSE	To save energy	0	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD003789553	Learning or "smart" thermostat	12	Yes	Yes	TRUE	4	2	4	4	99	TRUE	FALSE	It's ENERGY STAR-	TRUE	Yes	Yes	0	FALSE	works with Alexa and cell phone	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE	
CAD000433897	Showerhead	4	Yes	Yes	TRUE	4	4	3	4	3	FALSE	FALSE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	Needed to replace anyway	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD000433897	Hot water pipe insulation for your hot water heater	7	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No	0	0	TRUE	To save money	0	TRUE	Central air conditioner	Gas furnace/boiler	Electric	TRUE	FALSE	FALSE	
CAD002587132	Filter whistle	10	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	It's ENERGY STAR-	TRUE	No	0	0	TRUE	To save energy	0	TRUE	Central air conditioner	Electric furnace	Gas	TRUE	FALSE	FALSE	
CAD002544037	Room air conditioner	1	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	No	0	0	FALSE	To save money	0	TRUE	Central air conditioner	Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE



Measure Information			Criterion A: Familiarity with at least one Ameren Missouri program, rebate, or discount			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure						Criterion C: They had a valid reason for considering the adopted measure energy efficient		Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a rebate from Ameren, and they stated a valid reason for not applying for an Ameren rebate				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas savings			Meeting all criteria			
Cadmus Account Key	Measure	Measure Subfix	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	C7. How do you know the [measure] is energy efficient?	Criterion C met? (qualitative assessment)	G10. Did you receive a rebate, discount, or tax credit for installing the [measure]?	G11. Did you get a rebate from Ameren Missouri?	G12. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the [measure]?	Criterion D met? (qualitative assessment)	G8. Which of the following reasons best describe why you decided to install a [measure]?	Which of the following reasons best describe why you chose an energy efficient version of a [measure]?	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Water Heating Fuel	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002544037	Room air purifier		2 Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	The retailer/dealer/contractor told me it was	TRUE	No		Just forgot about it	TRUE	health	It had other features that I liked	FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	Gas	TRUE	FALSE	FALSE
CAD002544037	Learning or "smart" thermostat		12 Yes	No	TRUE	98	98	98	98	98	FALSE	FALSE	It's ENERGY STAR-certified	TRUE	Don't know			FALSE	To save money		TRUE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002546182	Showerhead		4 Yes	No	TRUE	1	1	1	1	1	FALSE	TRUE	1 was sent by Ameren 5 yes ago	FALSE	No		I wasn't sure my equipment qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	Electric	TRUE	FALSE	FALSE
CAD002440601	Furnace fan with ECM (Electronically Commutated Motor)		9 No	No	FALSE	2	2	1	1	1	FALSE	TRUE	The retailer/dealer/contractor told me it was	TRUE	Yes	No		TRUE	To replace failing equipment	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	Gas	FALSE	FALSE	FALSE
CAD002198657	Kitchen faucet aerator		5 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No		Don't know	FALSE	Don't know	Don't know	FALSE	Central air conditioner	Electric furnace Other (please specify):wood stoveElectric	Electric	TRUE	FALSE	FALSE
CAD002198657	Bathroom faucet aerator		6 Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	FALSE	No		Don't know	FALSE	Don't know	Don't know	FALSE	Central air conditioner	Electric furnace Other (please specify):wood stoveElectric	Electric	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002554092	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	2	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler Electric baseboard heating system	TRUE	TRUE	FALSE
CAD000457561	Heat pump Tune-up	Yes	Yes	TRUE	98	1	99	1	1	FALSE	TRUE	No	0	too small to qualify	FALSE	To save energy		TRUE	Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002598294	Air conditioner Tune-up	No	No	FALSE	2	2	2	2	2	TRUE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000158178	Air conditioner Tune-up	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler Electric furnace	TRUE	FALSE	FALSE
CAD000030326	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	99	4	4	FALSE	FALSE	No	0	Don't know	FALSE	safety & all of the above	All of the above	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003394323	Air conditioner Tune-up	Yes	Yes	TRUE	99	4	4	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002751793	Air conditioner Tune-up	Yes	Yes	TRUE	3	1	2	1	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD000266297	Air conditioner Tune-up	No	No	FALSE	3	4	98	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002522586	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	99	2	99	TRUE	FALSE	Don't know	0	0	FALSE	routine maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002528534	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Semi annual check up	TRUE	Routine maintenance	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD003390794	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002768417	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	No	0	Did not know a tune up qualified	TRUE	Standard service check	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002181135	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	Yes	Yes	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000326112	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	1	4	99	FALSE	TRUE	No	0	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002555793	Air conditioner Tune-up	No	Don't know	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	Maintain equipment	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000277573	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	No need. Program not worth the time	TRUE	Performance	General maintenance	FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD002217834	Heat pump Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000070306	Heat pump Tune-up	Yes	Yes	TRUE	4	4	99	3	99	FALSE	FALSE	No	0	Don't know	FALSE	to run properly	General maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002644496	Air conditioner Tune-up	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003808682	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	Annual Policy	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000382090	Air conditioner Tune-up	No	No	FALSE	2	3	2	99	3	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002215623	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	Did not know a tuneup qualified for a rebate	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002602553	Air conditioner Tune-up	Yes	Yes	TRUE	2	98	99	98	98	TRUE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000032528	Air conditioner Tune-up	No	Yes	TRUE	2	2	3	1	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002419007	Air conditioner Tune-up	Don't know	Don't know	FALSE	2	3	2	2	2	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Other (please specify):CentralDon't know	TRUE	FALSE	FALSE
CAD000188830	Heat pump Tune-up	Yes	No	TRUE	1	98	98	1	98	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric baseboard heating system	FALSE	FALSE	FALSE
CAD000034090	Air conditioner Tune-up	Don't know	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	0	0	FALSE	Replacement. Item stolen.	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002439775	Air conditioner Tune-up	No	Yes	TRUE	3	3	99	3	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003617258	Heat pump Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Don't know	0	0	FALSE	To save energy		TRUE	Don't know	Don't knowGas	FALSE	FALSE	FALSE
CAD003507695	Air conditioner Tune-up	No	No	FALSE	4	4	1	1	1	FALSE	TRUE	No	0	0	TRUE	To save money		TRUE	Window or wall air conditioner	Other (please specify):Window unitElectric	FALSE	FALSE	FALSE
CAD002631573	Air conditioner Tune-up	Yes	No	TRUE	1	2	1	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002615921	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002559524	Air conditioner Tune-up	Don't know	Yes	TRUE	1	99	2	99	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003769191	Heat pump Tune-up	Yes	Yes	TRUE	2	2	2	2	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditionerPortable air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000420746	Air conditioner Tune-up	No	Yes	TRUE	2	3	3	3	3	TRUE	FALSE	Yes	No	Turn up at no cost	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000072128	Heat pump Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	Having problems	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002350896	Air conditioner Tune-up	Yes	Yes	TRUE	2	1	2	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002496225	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002588293	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002490752	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000194142	Air conditioner Tune-up	Yes	Yes	TRUE	1	4	3	2	3	FALSE	TRUE	Don't know	0	0	FALSE	Issue	Repairs	FALSE	Central air conditioner/Air-source heat pump	Gas furnace/boiler Electric furnace	TRUE	FALSE	FALSE
CAD000355006	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002379148	Air conditioner Tune-up	No	Yes	TRUE	1	2	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002556255	Air conditioner Tune-up	Yes	Yes	TRUE	99	2	99	2	4	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002444013	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD003714734	Air conditioner Tune-up	No	No	FALSE	98	2	98	98	98	TRUE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000353882	Air conditioner Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	Needed Freon	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002498237	Air conditioner Tune-up	No	No	FALSE	4	4	4	99	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002505012	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	3	99	98	FALSE	TRUE	Don't know	0	0	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003643855	Air conditioner Tune-up	Yes	No	TRUE	2	2	1	2	2	FALSE	TRUE	No	0	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002469260	Air conditioner Tune-up	No	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002636733	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Other (please specify):Central heat, gasGas	TRUE	FALSE	FALSE
CAD003503012	Air conditioner Tune-up	No	No	FALSE	1	98	98	98	98	FALSE	TRUE	No	0	0	TRUE	routine service	Routine maintenance	FALSE	Central air conditioner	Other (please specify):wood stoveElectric	TRUE	FALSE	FALSE
CAD002261419	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	4	3	3	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Other (please specify):Gas Force airGas	TRUE	FALSE	FALSE
CAD002455713	Air conditioner Tune-up	Yes	Yes	TRUE	3	99	4	4	99	FALSE	FALSE	Yes	No	Don't know	FALSE	standard maintenance	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000168511	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	2	FALSE	TRUE	No	0	didn't know about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002769816	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002222845	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	98	2	TRUE	FALSE	No	0	Not aware of it.	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002380847	Air conditioner Tune-up	No	Yes	TRUE	2	1	1	99	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditionerDuctless or mini-split heat pump	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002248093	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	3	3	TRUE	FALSE	No	0	Did not know	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002597413	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	2	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002576377	Heat pump Tune-up	No	Don't know	FALSE	1	2	2	3	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002356171	Air conditioner Tune-up	Yes	Yes	TRUE	98	1	2	1	99	FALSE	TRUE	Yes	Don't know	0	FALSE	All the above and annual maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000199609	Air conditioner Tune-up	Yes	Yes	TRUE	2	98	3	98	3	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler Electric furnace	TRUE	FALSE	FALSE
CAD002571125	Air conditioner Tune-up	No	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I am still planning to apply	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002333131	Heat pump Tune-up	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Was making a noise	Repairs	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD000266623	Air conditioner Tune-up	No	Yes	TRUE	2	4	2	2	4	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000275880	Air conditioner Tune-up	No	No	FALSE	1	98	1	98	98	FALSE	TRUE	Yes	No	Don't know	FALSE	check every 6 months	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000047620	Air conditioner Tune-up	No	Yes	TRUE	2	3	3	98	98	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002415372	Heat pump Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Had no idea that this was even possible	TRUE	Routine maintenance	Routine maintenance	FALSE	Central air conditioner Ductless or mini-split heat pump	Ductless or mini-split heat pump Air-source heat pump	TRUE	FALSE	FALSE
CAD002523848	Heat pump Tune-up	Yes	Yes	TRUE	2	2	1	1	98	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	proper operation	General maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002313525	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002558071	Air conditioner Tune-up	No	No	FALSE	3	3	2	3	2	TRUE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000128422	Air conditioner Tune-up	Don't know	Don't know	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Maintenance	General maintenance	FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler Other (please specify):Wall unitGas	TRUE	FALSE	FALSE
CAD002328751	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	1	2	1	FALSE	TRUE	No	0	did not know i could	TRUE	To improve home comfort		FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	FALSE	FALSE	FALSE
CAD000126018	Air conditioner Tune-up	Don't know	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	0	0	FALSE	Scheduled	General maintenance	FALSE	Central air conditionerAir-source heat pump Electric furnace	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002339280	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	98	98	98	FALSE	TRUE	Yes	No	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002481240	Heat pump Tune-up	Yes	No	TRUE	2	3	1	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Portable air conditioner Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000215602	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I didn't know that it qualified	TRUE	maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002342641	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Routine annual contract	TRUE	Routine annual	Routine maintenance	FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	FALSE	FALSE	FALSE
CAD002420707	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Air-source heat pump	FALSE	FALSE	FALSE
CAD003524609	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	1	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000357643	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	98	4	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	save on repairs	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002587103	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	2	1	99	FALSE	TRUE	Yes	Yes	0	FALSE	maintain systems	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002549797	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	3	2	TRUE	FALSE	Yes	Yes	0	FALSE	warranty item	Part of other contracts or warranties	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002230173	Air conditioner Tune-up	No	No	FALSE	4	4	1	98	3	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002679628	Air conditioner Tune-up	No	No	FALSE	2	2	2	2	2	TRUE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002636379	Air conditioner Tune-up	Don't know	Don't know	FALSE	98	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002506641	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	3	99	FALSE	FALSE	Yes	No	Don't know	FALSE	To save energy		TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD002292085	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	correct a problem	Repairs	FALSE	Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002473934	Air conditioner Tune-up	Yes	Yes	TRUE	3	2	3	3	3	TRUE	FALSE	No	0	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000136688	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000077308	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	Yes	No	didn't know Ameren offered a rebate	TRUE	extend life of equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000476495	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Yes	Don't know	0	FALSE	Part of contract for new item	Part of other contracts or warranties	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002211960	Air conditioner Tune-up	No	No	FALSE	1	3	3	99	98	FALSE	TRUE	No	0	0	TRUE	Clean up dust	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000033814	Air conditioner Tune-up	No	Yes	TRUE	3	4	99	4	3	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	preventive maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000419733	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD000265200	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	3	3	TRUE	FALSE	No	0	Don't know	FALSE	Annual Service	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000361906	Air conditioner Tune-up	No	Yes	TRUE	2	3	4	3	3	TRUE	FALSE	Yes	Yes	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003510019	Air conditioner Tune-up	No	No	FALSE	1	98	98	99	2	FALSE	TRUE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler Electric baseboard heating systemElectric furnace	TRUE	FALSE	FALSE
CAD000115006	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	99	4	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000086295	Heat pump Tune-up	Yes	Don't know	TRUE	1	99	1	1	99	FALSE	TRUE	No	0	Landlord	FALSE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000361102	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	not applicable	FALSE	maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000123471	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	Done yearly	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002462231	Air conditioner Tune-up	Yes	Yes	TRUE	4	99	4	3	99	FALSE	FALSE	No	0	Didn't know about it	TRUE	To maintain equipment	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003574894	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	4	1	4	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Window or wall air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD000147551	Air conditioner Tune-up	Yes	No	TRUE	98	4	4	4	4	FALSE	FALSE	No	0	not aware of it	TRUE	safety	Safety	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002365441	Air conditioner Tune-up	No	No	FALSE	3	3	98	99	1	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000363839	Air conditioner Tune-up	No	No	FALSE	3	99	98	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000370030	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	1	99	FALSE	TRUE	No	0	Didn't know it was available	TRUE	keep it working in good order.	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002243068	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002317306	Air conditioner Tune-up	Don't know	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	had to be replaced	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000416421	Air conditioner Tune-up	Yes	Yes	TRUE	3	4	98	3	98	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002761518	Air conditioner Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	Yes	No	I didn't know about it	TRUE	have a contract with scott lee	Part of other contracts or warranties	FALSE	Central air conditioner	Don't knowGas	TRUE	FALSE	FALSE
CAD000289409	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Not offered	TRUE	Keep equipment running effectively	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000144310	Air conditioner Tune-up	No	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000150210	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	to continue warranty	Part of other contracts or warranties	FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002372778	Air conditioner Tune-up	No	Yes	TRUE	99	99	2	99	99	TRUE	FALSE	No	0	Did the tune up myself	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002240050	Air conditioner Tune-up	Yes	Yes	TRUE	1	99	99	1	99	FALSE	TRUE	No	0	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD002654763	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD000422492	Heat pump Tune-up	Don't know	Yes	TRUE	3	3	4	3	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD002706616	Air conditioner Tune-up	Yes	Don't know	TRUE	2	98	2	3	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002573928	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	apartment staff does it	Part of other contracts or warranties	FALSE	Central air conditioner	Other (please specify):apb uilt in 1963artment building Electric	TRUE	FALSE	FALSE
CAD000136744	Air conditioner Tune-up	Don't know	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD003551000	Air conditioner Tune-up	Yes	No	TRUE	3	99	99	99	99	FALSE	FALSE	No	0	I live at an apartment complex and they decided how to handle the	FALSE	It wasn't working properly	Repairs	FALSE	Don't know	Don't knowGas	FALSE	FALSE	FALSE
CAD002753819	Air conditioner Tune-up	No	No	FALSE	1	1	1	99	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Don't knowGas	TRUE	FALSE	FALSE
CAD003626520	Air conditioner Tune-up	No	No	FALSE	2	4	1	99	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000252745	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	99	99	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Long life of appliance	To save money	TRUE	Central air conditioner	Gas furnace/boiler Other (please specify):Radiators - contained water systemGas	TRUE	FALSE	FALSE
CAD002260568	Air conditioner Tune-up	No	No	FALSE	2	2	2	2	2	TRUE	FALSE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Other (please specify):Centralized Cooling/heating systemElectric	TRUE	FALSE	FALSE
CAD002227938	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002749119	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002303970	Air conditioner Tune-up	Yes	No	TRUE	2	2	1	98	98	FALSE	TRUE	No	0	Just renting	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002792077	Air conditioner Tune-up	Don't know	No	FALSE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000113591	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	wasn't aware that it was available	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000054814	Air conditioner Tune-up	No	Don't know	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner Portable air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003610943	Heat pump Tune-up	Yes	Yes	TRUE	2	2	2	98	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD003614516	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	98	3	3	FALSE	FALSE	No	0	Just forgot about it	TRUE	Don't know		FALSE	Central air conditioner	Don't know Electric	TRUE	FALSE	FALSE
CAD002791787	Air conditioner Tune-up	No	Yes	TRUE	98	4	98	3	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Twice a year service	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002699701	Air conditioner Tune-up	No	No	FALSE	3	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	HOME WARRANTY EXPIRING	Part of other contracts or warranties	FALSE	Central air conditioner	Electric furnace Other (please specify): 2' room heater Electric	TRUE	FALSE	FALSE
CAD000492069	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner Air-source heat pump	Gas furnace/boiler Electric baseboard heating system	TRUE	FALSE	FALSE
CAD002549563	Air conditioner Tune-up	Yes	Don't know	TRUE	1	4	4	98	4	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002643507	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000422866	Air conditioner Tune-up	No	No	FALSE	4	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Annual maintenance prevents problems.	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003362428	Air conditioner Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002295492	Air conditioner Tune-up	No	No	FALSE	99	4	99	4	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000343834	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	98	2	TRUE	FALSE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002533823	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002734156	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	4	2	2	TRUE	FALSE	No	0	Just forgot about it	TRUE	Preventative maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002434769	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Landlord paid for the tune up	FALSE	clean the unit	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002573695	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002750422	Air conditioner Tune-up	No	No	FALSE	1	99	4	99	99	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002216357	Air conditioner Tune-up	Yes	Yes	TRUE	4	99	99	4	99	FALSE	FALSE	Yes	No	Received rebate from sheet metal union; wasn't aware of Ameren rebate	TRUE	Reg. maint. to avoid breakdowns	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002678733	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	2	2	1	FALSE	TRUE	No	0	Didn't know about the rebate	TRUE	To maintain the equipment life	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002541475	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	safety/preventive maintenance	Safety	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002343241	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	3	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002813599	Air conditioner Tune-up	Don't know	Don't know	FALSE	4	4	4	3	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002295122	Heat pump Tune-up	Yes	Yes	TRUE	3	4	99	99	3	FALSE	FALSE	No	0	Didn't know about it	TRUE	scheduled maintenance	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002747121	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	1	99	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditionerDuctless or mini-split heat pump	Ductless or mini-split heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000435328	Air conditioner Tune-up	No	Yes	TRUE	98	98	2	98	98	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditionerPortable air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000174725	Air conditioner Tune-up	No	No	FALSE	98	3	98	99	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002313628	Air conditioner Tune-up	No	No	FALSE	1	2	4	2	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditionerDuctless or mini-split heat pump	Ductless or mini-split heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000395599	Air conditioner Tune-up	No	No	FALSE	2	3	98	3	2	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002504058	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	98	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000217412	Air conditioner Tune-up	Yes	No	TRUE	2	3	4	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000187060	Air conditioner Tune-up	Yes	Yes	TRUE	2	98	98	98	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	was/n work right	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003794855	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	2	2	2	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000195455	Air conditioner Tune-up	Don't know	No	FALSE	2	2	2	2	2	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003783590	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Just forgot about it	TRUE	Make sure its in working order	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002667575	Air conditioner Tune-up	No	No	FALSE	1	3	2	99	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002665701	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003542327	Heat pump Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Don't knowGas	FALSE	FALSE	FALSE
CAD002207091	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	2	99	99	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003565369	Air conditioner Tune-up	Yes	Yes	TRUE	1	99	99	99	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner Portable air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002544965	Heat pump Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Ensure operating efficiency	To save energy	TRUE	Central air conditioner Air-source heat pump Gas furnace/boiler Air-source heat pump	Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002565967	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	99	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003360984	Air conditioner Tune-up	Yes	Don't know	TRUE	3	2	2	2	3	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002555908	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	99	99	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002326046	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	99	2	TRUE	FALSE	No	0	Don't know	FALSE	Routine check up	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002360439	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Didn't know about	TRUE	Repair	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002759062	Air conditioner Tune-up	No	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	wasn't aware of	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002809585	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	98	FALSE	FALSE	No	0	Didn't know such a thing	TRUE	Maintenance	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000304538	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002406125	Air conditioner Tune-up	No	Yes	TRUE	2	4	2	98	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002400575	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000419731	Air conditioner Tune-up	No	Yes	TRUE	98	2	2	2	98	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002368182	Air conditioner Tune-up	Yes	No	TRUE	1	99	99	1	1	FALSE	TRUE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner/Portable air conditioner	Gas furnace/boiler/ Electric baseboard heating system	TRUE	FALSE	FALSE
CAD003475103	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000033439	Air conditioner Tune-up	Don't know	No	FALSE	1	2	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002598410	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002697161	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002338562	Heat pump Tune-up	Yes	Yes	TRUE	3	99	3	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD000112591	Air conditioner Tune-up	Yes	Yes	TRUE	1	4	4	1	3	FALSE	TRUE	No	0	I am still planning to apply	FALSE	Make sure there are no problems	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003608885	Air conditioner Tune-up	No	No	FALSE	2	2	2	99	1	FALSE	TRUE	No	0	0	TRUE	Ensure longevity	To save money	TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002679725	Heat pump Tune-up	Don't know	Yes	TRUE	99	99	4	98	99	FALSE	FALSE	Yes	No	Don't know	FALSE	To save money		TRUE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD000362770	Air conditioner Tune-up	Don't know	Yes	TRUE	2	3	2	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002658426	Air conditioner Tune-up	No	No	FALSE	98	98	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002543997	Air conditioner Tune-up	Yes	No	TRUE	2	98	98	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002451805	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	repair	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003700034	Air conditioner Tune-up	No	Yes	TRUE	4	1	98	2	3	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditionerDuctless or mini-split heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002207358	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000245212	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002321046	Air conditioner Tune-up	Yes	No	TRUE	98	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000414894	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	didn't even think of it	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000467019	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000049052	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002363402	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	annual tune up to improve quality of product/ind life	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002384242	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	1	1	1	FALSE	TRUE	No	0	Don't own property	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002287001	Air conditioner Tune-up	Yes	Yes	TRUE	4	99	99	4	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002762757	Air conditioner Tune-up	Yes	Yes	TRUE	98	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler Electric baseboard heating system	TRUE	FALSE	FALSE
CAD002209716	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To avoid equipment failures	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003860888	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I didn't know I could apply	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002325613	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner portable air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002178812	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002475366	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	1	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Other (please specify):RADIATORSDon't know	TRUE	FALSE	FALSE
CAD002215970	Air conditioner Tune-up	Yes	Yes	TRUE	4	2	98	3	3	TRUE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000237665	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002402877	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000175035	Air conditioner Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Not aware	TRUE	Annual Maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003865659	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Maintenance done by owner	FALSE	Required	Part of other contracts or warranties	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003720290	Heat pump Tune-up	Yes	Yes	TRUE	1	2	1	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner/Portable air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002330507	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	1	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002181439	Heat pump Tune-up	Yes	Yes	TRUE	2	2	1	2	2	FALSE	TRUE	No	0	did not qualify, had it done previous year	FALSE	To save energy		TRUE	Ductless or mini-split heat pump Air-source heat pump Gas furnace/boiler	Ductless or mini-split heat pump Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002489436	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	1	3	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000367804	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	working properly	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002248392	Air conditioner Tune-up	No	No	FALSE	99	2	98	99	98	TRUE	FALSE	No	0	0	TRUE	malfunction	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002266784	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	3	2	98	TRUE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002290317	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	Yes	Don't know	0	FALSE	Preventive Maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002299024	Air conditioner Tune-up	No	No	FALSE	99	3	1	99	99	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002506497	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002567438	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	99	1	FALSE	TRUE	No	0	Didn't know I could.	TRUE	Suspected issue	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002520393	Heat pump Tune-up	Yes	Don't know	TRUE	2	2	98	99	1	FALSE	TRUE	Don't know	0	0	FALSE	clean filter	General maintenance	FALSE	Air-source heat pump Other (please specify): window unit	Air-source heat pump	TRUE	FALSE	FALSE
CAD002446354	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I rent	FALSE	annual check	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003560208	Heat pump Tune-up	Yes	Yes	TRUE	3	4	3	3	3	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner Air-source heat pump Electric baseboard heating system Electric furnace	Electric furnace	TRUE	FALSE	FALSE
CAD000081419	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	99	1	98	FALSE	TRUE	No	0	contractor did not qualify	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002574340	Air conditioner Tune-up	No	No	FALSE	4	3	2	3	4	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Window or wall air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD000237711	Air conditioner Tune-up	No	Yes	TRUE	1	98	3	3	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD000456248	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Needed fixing	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002534503	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000466195	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002790081	Air conditioner Tune-up	Don't know	Yes	TRUE	3	4	99	98	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003501894	Air conditioner Tune-up	Yes	No	TRUE	2	3	1	98	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	it was suggested by vendor	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000237084	Air conditioner Tune-up	No	Yes	TRUE	3	1	3	99	3	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003527865	Air conditioner Tune-up	Yes	No	TRUE	2	2	2	2	2	TRUE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Don't knowElectric	TRUE	FALSE	FALSE
CAD000333971	Air conditioner Tune-up	Yes	No	TRUE	99	1	1	1	1	FALSE	TRUE	No	0	we did not know about this	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002546361	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	98	2	TRUE	FALSE	No	0	It was confusing	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000378385	Air conditioner Tune-up	Yes	Yes	TRUE	1	99	4	99	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD002635175	Heat pump Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Electric baseboard heating system	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003667874	Air conditioner Tune-up	Yes	No	TRUE	3	3	3	3	3	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000391152	Air conditioner Tune-up	Don't know	No	FALSE	3	3	98	1	98	FALSE	TRUE	No	0	0	TRUE	yearly maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002341247	Air conditioner Tune-up	No	Yes	TRUE	2	2	3	2	3	TRUE	FALSE	No	0	Don't know	FALSE	ac stopped working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000483092	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner Other (please specify):Attic fan	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003681190	Air conditioner Tune-up	Don't know	Don't know	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	needed repair	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002742667	Air conditioner Tune-up	Don't know	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002569850	Air conditioner Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	Quality check	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000441771	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	99	4	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002807348	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	General maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003706593	Air conditioner Tune-up	Yes	No	TRUE	4	4	99	99	99	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002352707	Heat pump Tune-up	Yes	Don't know	TRUE	98	4	4	98	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Air-source heat pump	Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000462079	Air conditioner Tune-up	Don't know	Yes	TRUE	1	2	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002500429	Air conditioner Tune-up	Yes	Yes	TRUE	3	98	2	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	longevity of equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002316671	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Elim emerg svc calls	General maintenance	FALSE	Central air conditioner	Other (please specify):Gas furnace - forced airGas	TRUE	FALSE	FALSE
CAD000202433	Air conditioner Tune-up	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000302233	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002393113	Heat pump Tune-up	Yes	Yes	TRUE	3	3	2	3	3	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD003866941	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	99	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	so it runs okay	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002231592	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002691639	Air conditioner Tune-up	No	Don't know	FALSE	3	3	2	3	3	TRUE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002310030	Air conditioner Tune-up	No	No	FALSE	99	99	99	4	99	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Don't know	Don't knowElectric	FALSE	FALSE	FALSE
CAD002508130	Air conditioner Tune-up	Don't know	Yes	TRUE	2	2	99	99	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000134747	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	2	2	99	FALSE	TRUE	Yes	Yes	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000315241	Air conditioner Tune-up	Don't know	Yes	TRUE	2	3	2	2	2	TRUE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002481798	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Don't knowElectric	TRUE	FALSE	FALSE
CAD002390596	Air conditioner Tune-up	No	Yes	TRUE	99	4	4	99	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner Window or wall air conditioner	Don't knowGas	TRUE	FALSE	FALSE
CAD002575036	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	avoid break-down	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003822782	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	wasn't aware you could	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000298899	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Yes	No	Wasn't aware of its availability.	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000287443	Air conditioner Tune-up	No	Don't know	FALSE	4	4	4	4	3	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002649948	Heat pump Tune-up	Yes	Yes	TRUE	2	98	3	2	3	TRUE	FALSE	No	0	contractor doesn't have your equipment	FALSE	repair	Repairs	FALSE	Central air conditionerAir-source heat pump Electric furnace	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD000046477	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	WHAT IS CONSIDERED A TUNE UP TO AMEREN	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002464108	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	98	98	98	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002697240	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000367615	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	General maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002680037	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Didn't know about the program	TRUE	safety reasons	Safety	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002199039	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	My husband is HVAC Certified and did it himself	FALSE	Preventative Maintenance	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002747574	Air conditioner Tune-up	Don't know	No	FALSE	2	3	3	3	3	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000476087	Air conditioner Tune-up	Yes	Don't know	TRUE	2	99	99	99	2	TRUE	FALSE	Yes	No	Wasn't aware of this option	TRUE	Check up	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002601343	Air conditioner Tune-up	Yes	Yes	TRUE	99	3	1	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000257574	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Check before summer	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002312693	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	DIDN'T KNOW ABOUT IT	TRUE	MAKE SURE EQUIPMENT WAS IN GOOD WORKING ORDER	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002422048	Air conditioner Tune-up	No	Yes	TRUE	2	2	1	2	2	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003526997	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	99	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	NO COOL AIR	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002745960	Air conditioner Tune-up	Yes	No	TRUE	1	2	98	99	2	FALSE	TRUE	No	0	didn't know I could	TRUE	To save money		TRUE	Air-source heat pump	Air-source heat pump Electric furnace	FALSE	FALSE	FALSE
CAD002585689	Air conditioner Tune-up	Yes	No	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002211003	Heat pump Tune-up	Yes	Don't know	TRUE	3	3	3	3	3	FALSE	FALSE	No	0	Don't know	FALSE	Keep it working efficiently	To save energy	TRUE	Air-source heat pump Ground-source or geothermal heat pump	Ductless or mini-split heat pump Air-source heat pump Ground-source or geothermal heat pump	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002344557	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	2	1	1	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Air-source heat pump	TRUE	FALSE	TRUE
CAD003387771	Air conditioner Tune-up	No	No	FALSE	1	1	1	2	1	FALSE	TRUE	No	0	0	TRUE	Stop Working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003761896	Air conditioner Tune-up	No	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002517915	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	we just do it every 6 mos	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000487298	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002797064	Air conditioner Tune-up	No	No	FALSE	2	98	1	99	99	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002517543	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	99	99	99	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002558609	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	Yes	No	0	TRUE	Preventive maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003800020	Air conditioner Tune-up	Yes	Yes	TRUE	98	4	99	99	4	FALSE	FALSE	No	0	0	FALSE	To save money		TRUE	Central air conditioner	Other (please specify): ceiling cable electric	TRUE	FALSE	FALSE
CAD003390149	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	0	FALSE	Wasn't running properly	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000408637	Air conditioner Tune-up	Yes	Yes	TRUE	3	4	1	1	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003845013	Heat pump Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	Don't know	0	0	FALSE	Bought house that was a fixer upper	Repairs	FALSE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000420099	Air conditioner Tune-up	Yes	Yes	TRUE	99	4	99	4	99	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002662787	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000130306	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	3	3	3	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002454622	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002286741	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002515565	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002647146	Air conditioner Tune-up	No	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	Yes	Yes	0	FALSE	Comes with the warranty	Part of other contracts or warranties	FALSE	Central air conditioner/Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD000291265	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000163999	Heat pump Tune-up	Yes	Yes	TRUE	1	98	2	98	98	FALSE	TRUE	No	0	Don't know	FALSE	maintenance	General maintenance	FALSE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002786857	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	0	0	FALSE	routine maintenance for optimum performance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002538092	Heat pump Tune-up	No	No	FALSE	1	4	3	98	1	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000175588	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002331012	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	contractor isn't an ameren designated	FALSE	preventive maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002631324	Air conditioner Tune-up	Yes	No	TRUE	1	2	2	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD003674356	Air conditioner Tune-up	Don't know	Yes	TRUE	2	1	1	2	2	FALSE	TRUE	Yes	Yes	0	FALSE	Unit not functioning properly	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003613624	Heat pump Tune-up	Yes	No	TRUE	2	98	2	99	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002637761	Air conditioner Tune-up	No	No	FALSE	2	3	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000218671	Air conditioner Tune-up	No	Yes	TRUE	3	2	2	3	2	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002399131	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Didn't realize there was a rebate	TRUE	To keep equipment running efficiently	To save energy	TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD000450498	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Didn't know a tune up qualifies	TRUE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000287579	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	2	FALSE	TRUE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000223618	Air conditioner Tune-up	Don't know	Don't know	FALSE	4	4	4	4	4	FALSE	FALSE	Yes	Don't know	0	FALSE	to keep equipment working well	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002682004	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	2	2	1	FALSE	TRUE	Yes	Don't know	0	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003403257	Heat pump Tune-up	No	No	FALSE	2	1	1	99	99	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Other (please specify): Thermostat controls both heat and cool	Don't knowElectric	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002592153	Air conditioner Tune-up	Yes	Yes	TRUE	4	2	4	4	4	TRUE	FALSE	No	0	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Electric baseboard heating system Electric furnace	TRUE	TRUE	FALSE
CAD000041202	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000257236	Air conditioner Tune-up	Yes	No	TRUE	98	4	4	98	4	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002786723	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002235273	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	99	99	TRUE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000287984	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	99	98	TRUE	FALSE	No	0	My son does it at no charge so I don't get a rebate	FALSE	my son does it annually	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002452776	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	3	2	2	FALSE	TRUE	No	0	Not my home rental	FALSE	To save money		TRUE	Other (please specify): Not my house	Don't know Electric	FALSE	FALSE	FALSE
CAD002408402	Air conditioner Tune-up	No	No	FALSE	2	2	2	99	1	FALSE	TRUE	Yes	No	Don't know	FALSE	To save money		TRUE	Central air conditioner	Other (please specify): Three gas furnaces	TRUE	FALSE	FALSE
CAD000178595	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	didn't know I could	TRUE	done annually	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003466429	Air conditioner Tune-up	Yes	Yes	TRUE	98	99	98	98	98	FALSE	FALSE	No	0	Did not realize I could	TRUE	To improve home comfort		FALSE	Central air conditioner Air-source heat pump Electric heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002731748	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	98	98	98	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002559318	Air conditioner Tune-up	No	No	FALSE	2	1	2	2	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002566395	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	Didn't no about it	TRUE	Gets checked twice a year	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002763723	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002414106	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000359294	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Don't know		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002418923	Air conditioner Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000430881	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Tore up.	Repairs	FALSE	Central air conditioner	Other (please specify):Central gas heatGas	TRUE	FALSE	FALSE
CAD003729887	Heat pump Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002357394	Air conditioner Tune-up	No	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	FALSE	FALSE	FALSE
CAD002490152	Air conditioner Tune-up	Yes	No	TRUE	4	99	98	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Window or wall air conditioner	Gas furnace/boiler Electric baseboard heating system	FALSE	FALSE	FALSE
CAD002193047	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	TRUE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003575795	Air conditioner Tune-up	No	No	FALSE	98	98	99	98	98	FALSE	FALSE	No	0	0	TRUE	Needed replacing	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003678628	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	4	1	2	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Window or wall air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD002490565	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	2	FALSE	TRUE	No	0	I didn't know of the rebate	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD002287806	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	3	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002578014	Heat pump Tune-up	No	Yes	TRUE	99	4	99	99	98	FALSE	FALSE	Yes	No	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000454608	Air conditioner Tune-up	Yes	No	TRUE	1	99	99	99	99	FALSE	TRUE	No	0	Because my husband is a heating and cooling contractor and he completed the tune-up himself.	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003621601	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002685007	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	3	98	98	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002552140	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Don't know	Electric furnace	FALSE	FALSE	FALSE
CAD002794077	Air conditioner Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler Other (please specify):wood furnaceGas	TRUE	FALSE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000237266	Heat pump Tune-up	Yes	Yes	TRUE	99	98	99	98	99	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	regular schedule	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump Other (please specify):wood burning stoveElectric	TRUE	FALSE	FALSE
CAD000064911	Air conditioner Tune-up	Don't know	Yes	TRUE	2	2	2	3	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002209335	Air conditioner Tune-up	No	No	FALSE	1	2	2	2	2	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002426821	Heat pump Tune-up	Yes	Yes	TRUE	2	3	1	1	2	FALSE	TRUE	No	0	I am still planning to apply	FALSE	To save energy		TRUE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD003632523	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002622250	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002276722	Heat pump Tune-up	No	No	FALSE	2	2	2	2	1	FALSE	TRUE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000095396	Heat pump Tune-up	Yes	Yes	TRUE	98	4	3	99	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD002564806	Air conditioner Tune-up	Don't know	No	FALSE	2	98	98	2	98	TRUE	FALSE	Yes	No	Don't know	FALSE	Don't know		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002229910	Air conditioner Tune-up	Yes	No	TRUE	98	98	99	99	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	replaced air conditioner as not working	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002660743	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	99	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD003699994	Air conditioner Tune-up	No	Yes	TRUE	2	3	2	99	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002455705	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	1	99	FALSE	TRUE	No	0	Don't know	FALSE	Maintenance agreement	Part of other contracts or warranties	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002743572	Air conditioner Tune-up	No	No	FALSE	98	4	98	99	99	FALSE	FALSE	No	0	0	TRUE	Age of unit	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000033220	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	1	2	3	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	Normal Maintenance Cycle	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003791151	Air conditioner Tune-up	No	No	FALSE	1	2	3	99	4	FALSE	TRUE	No	0	0	TRUE	It stopped cooling	Repairs	FALSE	Central air conditioner	Don't knowGas	TRUE	FALSE	FALSE
CAD002387608	Air conditioner Tune-up	Don't know	No	FALSE	4	4	99	4	4	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Window or wall air conditioner	Other (please specify):window unitsElectric	FALSE	FALSE	FALSE
CAD002279029	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	2	2	98	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003652205	Air conditioner Tune-up	No	Yes	TRUE	99	4	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Necessary	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000107573	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	99	1	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD003553667	Heat pump Tune-up	Don't know	Yes	TRUE	98	99	98	98	98	FALSE	FALSE	Don't know	0	0	FALSE	Don't know		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000038724	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	it was part of home repair insurance	FALSE	as part of a repair	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000392544	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000263446	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	99	99	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	TRUE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002799030	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	4	2	99	TRUE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003730321	Air conditioner Tune-up	No	Yes	TRUE	1	99	99	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	Air condition not cooling	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003537230	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I don't know if he did or not. I know I did not pay him anything since it was included in my purchase price.	FALSE	Included with purchase price	Part of other contracts or warranties	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002747558	Air conditioner Tune-up	Yes	No	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	I am still planning to apply	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000324845	Heat pump Tune-up	Yes	No	TRUE	4	99	98	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner Air-source heat pump Window or wall air conditioner	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002709983	Air conditioner Tune-up	No	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000090734	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	3	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000229215	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Did own work	FALSE	To save energy		TRUE	Central air conditioner	Other (please specify): Oil Furnace Don't know	TRUE	FALSE	FALSE
CAD002764322	Heat pump Tune-up	No	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD002497437	Air conditioner Tune-up	Yes	Yes	TRUE	99	98	98	98	99	FALSE	FALSE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Don't know Electric	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marking or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002251305	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	2	99	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002246874	Air conditioner Tune-up	Don't know	No	FALSE	3	3	98	98	3	FALSE	FALSE	No	0	0	TRUE	Checkup	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002191362	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	2	1	1	FALSE	TRUE	No	0	Under contract with the mobile home park	FALSE	Stopped working in the summer	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003519104	Air conditioner Tune-up	Yes	No	TRUE	98	99	98	99	98	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000473113	Air conditioner Tune-up	Yes	No	TRUE	2	2	2	2	1	FALSE	TRUE	No	0	It was confusing	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002459793	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	2	99	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002497304	Air conditioner Tune-up	Yes	No	TRUE	2	2	1	2	2	FALSE	TRUE	No	0	Don't know	FALSE	Had to be replaced	Replacement	FALSE	Central air conditioner	Electric furnace Other (please specify):Fuel oil furnaceElectric	TRUE	FALSE	FALSE
CAD000071868	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	1	2	2	FALSE	TRUE	Yes	No	I wasn't sure the tune-up qualified	TRUE	Maintain proper operation and service	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002230325	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Other (please specify):gas furnaceGas	TRUE	FALSE	FALSE
CAD002383456	Air conditioner Tune-up	Don't know	No	FALSE	3	3	3	99	3	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003871052	Air conditioner Tune-up	No	No	FALSE	98	4	98	99	99	FALSE	FALSE	No	0	0	TRUE	My central air conditioner unit outside broke & I replaced it and new furnace they were	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002341434	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	Don't know	0	0	FALSE	Old	General maintenance	FALSE	Other (please specify): Apt House (probably central air)	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000208965	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	2	1	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002193467	Air conditioner Tune-up	Don't know	Yes	TRUE	1	3	1	1	98	FALSE	TRUE	No	0	company failed to do it	FALSE	To save energy		TRUE	Central air conditioner	Air-source heat pump	TRUE	FALSE	FALSE
CAD002584243	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	99	99	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002810278	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	It stopped working so I decided to have it tuned up while it was repaired	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002274178	Air conditioner Tune-up	No	No	FALSE	98	98	99	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002713058	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	98	98	TRUE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002793916	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	4	4	3	TRUE	FALSE	Don't know	0	0	FALSE	Protect equipment	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000037786	Heat pump Tune-up	Yes	Yes	TRUE	1	3	1	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner/Air-source heat pump	Air-source heat pump	TRUE	FALSE	TRUE

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CAD000081940	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002429895	Air conditioner Tune-up	No	No	FALSE	3	3	3	3	3	FALSE	FALSE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002529631	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	2	3	2	FALSE	TRUE	No	0	I am still planning to apply	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002798531	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	99	4	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Maintenance	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002723093	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000346401	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002250194	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002493723	Air conditioner Tune-up	Don't know	No	FALSE	98	98	2	98	98	TRUE	FALSE	No	0	0	TRUE	needed it	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002397597	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Was not aware	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002406637	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003750928	Air conditioner Tune-up	Yes	Yes	TRUE	1	98	2	1	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	cleaning	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000048425	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	2	1	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Window or wall air conditioner	Electric baseboard heating systemOther (please specify):Window energy efficient air/heat unitElectric	FALSE	FALSE	FALSE
CAD002627227	Air conditioner Tune-up	Yes	Yes	TRUE	3	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	regular maintenance	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002533225	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002799431	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD000162214	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	4	4	2	TRUE	FALSE	No	0	was told it didnt qualify	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002602465	Heat pump Tune-up	Yes	Yes	TRUE	3	99	99	2	99	TRUE	FALSE	Yes	No	Don't know	FALSE	SEMI ANNUAL CHECK	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD000102403	Air conditioner Tune-up	Yes	Yes	TRUE	4	2	3	3	99	TRUE	FALSE	No	0	Not aware of rebates on seasonal tune-ups.	TRUE	Extend life of equipment.	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002607575	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Didn't know about it.	TRUE	regular maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler Electric furnace	TRUE	FALSE	FALSE
CAD000079094	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	99	99	98	FALSE	FALSE	Yes	No	air comnditioning company gave me credit	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002536264	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD000229136	Air conditioner Tune-up	Don't know	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Don't knowGas	TRUE	FALSE	FALSE

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CAD003709793	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	Routine maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002215554	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	Periodically schedule	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler Electric furnace	TRUE	FALSE	FALSE
CAD002720136	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000092700	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	2	2	98	TRUE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003810194	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	4	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002543128	Air conditioner Tune-up	No	No	FALSE	3	99	3	2	99	TRUE	FALSE	No	0	0	TRUE	regular maintenance	Routine maintenance	FALSE	Central air conditioner Other (please specify): ceiling fans	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000469834	Air conditioner Tune-up	Yes	Don't know	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000109182	Heat pump Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To save energy		TRUE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002617249	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	contract	Part of other contracts or warranties	FALSE	Central air conditioner	Air-source heat pump	TRUE	FALSE	FALSE
CAD003771953	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	98	99	FALSE	FALSE	Yes	No	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000364578	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000378906	Air conditioner Tune-up	Yes	Yes	TRUE	98	4	4	99	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE



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CAD002521071	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	99	1	FALSE	TRUE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002206861	Air conditioner Tune-up	No	No	FALSE	4	4	98	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Air-source heat pump	Air-source heat pump	FALSE	FALSE	FALSE
CAD000312804	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	2	4	4	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002688030	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	2	1	FALSE	TRUE	No	0	unaware of rebate for tuneup	TRUE	for regular maint	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003627636	Air conditioner Tune-up	No	Yes	TRUE	2	4	2	99	3	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002353792	Air conditioner Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	did not qualify as was too small	FALSE	Needed new A/C	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000207903	Air conditioner Tune-up	No	Yes	TRUE	4	99	98	99	99	FALSE	FALSE	No	0	did not know about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002538212	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Son in law HVAC guy	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003757150	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002304230	Heat pump Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Didn't know	TRUE	Wasn't functioning	Repairs	FALSE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD002416545	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000230805	Air conditioner Tune-up	No	Yes	TRUE	3	2	2	2	2	TRUE	FALSE	Don't know	0	0	FALSE	Make sure everything was running properly	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002752649	Heat pump Tune-up	Yes	No	TRUE	1	98	99	2	2	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE

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CAD000051483	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002383585	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner Ductless or mini-split heat pump Gas furnace/boiler	Ductless or mini-split heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003838352	Air conditioner Tune-up	Don't know	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002252708	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000263323	Air conditioner Tune-up	Don't know	No	FALSE	3	4	2	99	3	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003713251	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002814788	Air conditioner Tune-up	No	Yes	TRUE	1	4	2	98	98	FALSE	TRUE	No	0	landlord	FALSE	rent-maintenance	Part of other contracts or warranties	FALSE	Don't know	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002623729	Air conditioner Tune-up	No	Don't know	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000157619	Air conditioner Tune-up	No	No	FALSE	1	98	2	98	1	FALSE	TRUE	Yes	No	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002271522	Air conditioner Tune-up	Yes	No	TRUE	1	4	1	1	3	FALSE	TRUE	Don't know	0	0	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002613923	Heat pump Tune-up	Yes	Yes	TRUE	3	2	99	1	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	maintainance	General maintenanc	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD000398887	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	99	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	make sure it was working properly	General maintenanc	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002747457	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	It didn't look like it qualified according to the website	FALSE	Had new system installed	Replacement	FALSE	Central air conditioner	Other (please specify): Hot Water Baseboard HeatGas	TRUE	FALSE	FALSE
CAD000344983	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner/Air-source heat pump	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002620392	Air conditioner Tune-up	Yes	Yes	TRUE	3	4	3	3	4	FALSE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000211273	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	1	2	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002203660	Heat pump Tune-up	Yes	Yes	TRUE	1	3	4	3	99	FALSE	TRUE	Yes	No	Don't know	FALSE	maintain high efficiency	To save energy	TRUE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD003752115	Heat pump Tune-up	Yes	Yes	TRUE	4	4	4	4	99	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	extend life of equipment	To save money	TRUE	Air-source heat pump	Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002658274	Air conditioner Tune-up	Yes	Yes	TRUE	1	4	2	99	1	FALSE	TRUE	No	0	didn't know I could	TRUE	to maintain them	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002772736	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	99	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002511825	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000038267	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	3	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000148285	Air conditioner Tune-up	No	No	FALSE	1	4	2	2	1	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000109260	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	Maintain equipment	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000058722	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Dont know about	TRUE	Yearly service	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002253667	Air conditioner Tune-up	Don't know	No	FALSE	2	4	4	4	4	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000311666	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	99	99	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002512915	Air conditioner Tune-up	No	Yes	TRUE	2	1	3	2	1	FALSE	TRUE	Yes	No	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000440273	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	3	3	TRUE	FALSE	No	0	Don't know	FALSE	regular maintenance	Routine maintenance	FALSE	Central air conditioner	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD00264039	Air conditioner Tune-up	No	Don't know	FALSE	2	2	2	2	3	TRUE	FALSE	No	0	0	TRUE	Just had it serviced	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002380572	Air conditioner Tune-up	Yes	Yes	TRUE	99	1	1	99	99	FALSE	TRUE	No	0	Don't know	FALSE	Product Care	General maintenance	FALSE	Central air conditioner	Don't know/Don't know	TRUE	FALSE	FALSE
CAD002619977	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002403661	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	2	2	TRUE	FALSE	No	0	I applied, but I did not receive a rebate	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002780033	Air conditioner Tune-up	Yes	Yes	TRUE	3	2	2	3	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Repairs	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002754686	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002500192	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	quit working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002482671	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	98	98	99	TRUE	FALSE	No	0	wasn't aware	TRUE	preventive maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a			Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000442275	Air conditioner Tune-up	Yes	No	TRUE	4	4	2	2	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Air-source heat pump	Electric furnace	FALSE	FALSE	FALSE
CAD000088959	Air conditioner Tune-up	Yes	Yes	TRUE	2	98	3	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000313390	Air conditioner Tune-up	Yes	No	TRUE	1	99	99	99	99	FALSE	TRUE	No	0	Don't know	FALSE	Yearly Maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002500788	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	2	2	TRUE	FALSE	Don't know	0	0	FALSE	I quit working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002365577	Air conditioner Tune-up	No	No	FALSE	3	4	3	4	3	FALSE	FALSE	No	0	0	TRUE	up keep	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000040471	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	2	1	FALSE	TRUE	Yes	No	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003832689	Heat pump Tune-up	No	No	FALSE	1	2	2	2	2	FALSE	TRUE	No	0	0	TRUE	Broken	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD003542712	Air conditioner Tune-up	Yes	Yes	TRUE	4	2	3	99	4	TRUE	FALSE	Yes	Yes	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002630227	Heat pump Tune-up	No	No	FALSE	3	4	4	98	3	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD003623201	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	Old unit was broken	Repairs	FALSE	Window or wall air conditioner	Other (please specify):RadiatorDon't know	FALSE	FALSE	FALSE
CAD000048235	Air conditioner Tune-up	Yes	No	TRUE	3	3	3	3	3	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Maintenance contract	Part of other contracts or warranties	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002722419	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD00264212	Air conditioner Tune-up	Yes	Yes	TRUE	3	2	2	98	4	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Equipment failed	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002674232	Air conditioner Tune-up	Yes	Yes	TRUE	2	98	2	99	98	TRUE	FALSE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003832230	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003587211	Heat pump Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000157171	Air conditioner Tune-up	No	No	FALSE	1	3	1	98	2	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002777503	Air conditioner Tune-up	Don't know	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace Other (please specify);and infra red heatersGas	TRUE	FALSE	FALSE
CAD002524198	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003605882	Air conditioner Tune-up	Yes	Yes	TRUE	4	3	2	99	4	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	routine maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003862849	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	Yes	No	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000358123	Air conditioner Tune-up	Don't know	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner Other (please specify):PTA C	Gas furnace/boiler Other (please specify):PTA C Gas	TRUE	FALSE	FALSE
CAD002466600	Heat pump Tune-up	Yes	Yes	TRUE	99	2	99	99	99	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Air-source heat pump Gas furnace/boiler	FALSE	FALSE	FALSE

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002502078	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002680098	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	4	2	4	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000325799	Heat pump Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002313651	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD003517470	Air conditioner Tune-up	Yes	No	TRUE	1	2	2	2	1	FALSE	TRUE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002489212	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I do my own work	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000270464	Heat pump Tune-up	Don't know	Yes	TRUE	99	99	2	98	98	TRUE	FALSE	No	0	contractor didn't turn in application in a timely manner	FALSE	newly installed	Replacement	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002491500	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	Repairs	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000317739	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	service contract on new equipment	Part of other contracts or warranties	FALSE	Central air conditioner	Other (please specify); propane gas furnaceGas	TRUE	FALSE	FALSE
CAD000471452	Air conditioner Tune-up	Yes	Yes	TRUE	3	2	3	2	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002203765	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	2	2	99	FALSE	TRUE	No	0	was not aware of it	TRUE	to keep in good repair	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002371481	Air conditioner Tune-up	Don't know	Yes	TRUE	3	3	1	2	2	FALSE	TRUE	Don't know	0	0	FALSE	Don't know		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000321480	Air conditioner Tune-up	Yes	No	TRUE	2	4	2	4	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Repair	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002283943	Heat pump Tune-up	Don't know	No	FALSE	2	1	1	2	1	FALSE	TRUE	No	0	0	TRUE	yearly check up	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD000165214	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	2	1	1	FALSE	TRUE	Yes	Yes	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000414402	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	4	3	3	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Ductless or mini-split heat pump Window or wall air conditioner	Ductless or mini-split heat pump Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002303042	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002410491	Heat pump Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Air-source heat pump	FALSE	FALSE	FALSE
CAD002365877	Air conditioner Tune-up	No	No	FALSE	98	98	98	98	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002643549	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	regular maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002312433	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002285314	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	4	3	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000101310	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003544473	Heat pump Tune-up	Yes	Yes	TRUE	2	99	99	99	99	TRUE	FALSE	Don't know	0	0	FALSE	Don't know		FALSE	Central air conditioner Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002180787	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	1	98	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	Maintain efficiency	To save energy	TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD000174437	Air conditioner Tune-up	Yes	Yes	TRUE	3	4	3	3	3	FALSE	FALSE	Don't know	0	0	FALSE	To save money		TRUE	Central air conditioner	Don't knowGas	TRUE	FALSE	FALSE
CAD002561045	Air conditioner Tune-up	Yes	Yes	TRUE	4	1	1	1	1	FALSE	TRUE	Yes	No	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD002345132	Heat pump Tune-up	Yes	Yes	TRUE	1	2	3	3	1	FALSE	TRUE	No	0	Don't know	FALSE	HAVE CONTRACT WITH CONTRACTOR	Part of other contracts or warranties	FALSE	Central air conditionerAir-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE
CAD002279877	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Rental	FALSE	Don't know		FALSE	Air-source heat pump	Air-source heat pump	FALSE	FALSE	FALSE
CAD002447613	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	It was confusing	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002719020	Air conditioner Tune-up	No	No	FALSE	3	2	3	99	3	TRUE	FALSE	No	0	0	TRUE	To protect equipment	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler Electric baseboard heating system	TRUE	FALSE	FALSE
CAD000146210	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Broke	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003754388	Air conditioner Tune-up	No	No	FALSE	1	4	98	2	2	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric baseboard heating system	TRUE	FALSE	FALSE
CAD002567529	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	DID NOT KNOW ABOUT IT	TRUE	MAKE SURE IT IS OPERATING CORRECTLY	General maintenance	FALSE	Ground-source or geothermal heat pump	Ground-source or geothermal heat pump	TRUE	FALSE	FALSE
CAD000136504	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Did not know I had the opportunity	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003862879	Heat pump Tune-up	No	No	FALSE	1	1	2	2	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric baseboard heating system	FALSE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002340460	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Just forgot about it	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002686730	Air conditioner Tune-up	No	No	FALSE	2	3	2	99	99	TRUE	FALSE	Yes	No	Don't know	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002405435	Air conditioner Tune-up	Yes	No	TRUE	1	3	1	1	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler Electric baseboard heating system	TRUE	FALSE	FALSE
CAD002460252	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	1	1	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	TRUE
CAD002304389	Heat pump Tune-up	No	No	FALSE	1	2	3	3	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Don't knowElectric	FALSE	FALSE	FALSE
CAD000341598	Air conditioner Tune-up	No	Yes	TRUE	2	98	2	99	98	TRUE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002358813	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	3	99	4	FALSE	FALSE	No	0	old unit and just repaired	FALSE	did not work	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002786730	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	2	2	FALSE	TRUE	No	0	Don't know	FALSE	check for problems	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000471524	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002656317	Air conditioner Tune-up	Yes	No	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Don't knowElectric	TRUE	TRUE	FALSE
CAD002686030	Air conditioner Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	didn't pay renting	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002437806	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Did not know a rebate was available	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD000171359	Heat pump Tune-up	Don't know	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner/ portable air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD003875801	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	New built home	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002485426	Heat pump Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	Yes	No	no longer with Ameren	FALSE	replace old one/damaged	Replacement	FALSE	Central air conditioner/air-source heat pump	Other (please specify):infraredElectric	TRUE	FALSE	FALSE
CAD000357545	Air conditioner Tune-up	No	No	FALSE	98	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003872166	Air conditioner Tune-up	Don't know	Yes	TRUE	1	2	2	2	1	FALSE	TRUE	Yes	No	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002614331	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003826739	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	3	3	3	FALSE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002669830	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	1	FALSE	TRUE	No	0	Just forgot about it	TRUE	To improve home comfort		FALSE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002265871	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	General Practice	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000112786	Air conditioner Tune-up	Yes	Yes	TRUE	1	2	1	2	2	FALSE	TRUE	Yes	No	Did not know I could	TRUE	Preventive Maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000106806	Air conditioner Tune-up	No	Yes	TRUE	3	3	2	3	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002520048	Air conditioner Tune-up	No	No	FALSE	2	3	2	2	2	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000335788	Air conditioner Tune-up	Don't know	No	FALSE	2	98	99	99	98	TRUE	FALSE	Don't know	0	0	FALSE	stopped working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002362790	Air conditioner Tune-up	Don't know	Yes	TRUE	2	2	2	2	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Other (please specify):Outside wood furnaceElectric	TRUE	TRUE	FALSE
CAD002182871	Air conditioner Tune-up	Yes	No	TRUE	1	99	99	99	99	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	rotten and broken	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003651085	Air conditioner Tune-up	Yes	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Ductless or mini-split heat pump	TRUE	FALSE	FALSE
CAD002675784	Air conditioner Tune-up	Yes	Don't know	TRUE	2	99	99	99	99	TRUE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002731510	Air conditioner Tune-up	Don't know	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I was not informed of rebate opportunity	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002798368	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	didn't know about it	TRUE	extend life of unit	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000204371	Air conditioner Tune-up	Don't know	Yes	TRUE	2	98	2	99	99	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Improve system efficiency	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002342482	Air conditioner Tune-up	Yes	Yes	TRUE	3	4	4	99	2	TRUE	FALSE	No	0	Don't know	FALSE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000491458	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner/Air-source heat pump	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD003753576	Air conditioner Tune-up	Don't know	No	FALSE	2	99	99	99	99	TRUE	FALSE	No	0	0	TRUE	it wasn't cooling properly and needs to be replaced	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002770051	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	3	2	TRUE	FALSE	No	0	Just forgot about it	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	TRUE	FALSE
CAD002427941	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	3	3	3	TRUE	FALSE	Don't know	0	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria		
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	
CAD002698485	Air conditioner Tune-up	No	Yes	TRUE	4	2	2	4	4	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD002773808	Heat pump Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	It was just a service call	TRUE	To save money		TRUE	Central air conditioner	Don't know	Electric	FALSE	FALSE	FALSE
CAD002410089	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	3	4	99	FALSE	FALSE	Yes	Don't know	0	FALSE	Extend life of systems	To save money	TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE	
CAD002623081	Air conditioner Tune-up	Yes	Don't know	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD003497311	Air conditioner Tune-up	No	Yes	TRUE	2	2	2	3	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD002763970	Air conditioner Tune-up	Yes	Yes	TRUE	2	4	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Don't know		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE	
CAD000180851	Air conditioner Tune-up	No	No	FALSE	99	99	2	99	99	TRUE	FALSE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE	
CAD002807779	Air conditioner Tune-up	Yes	No	TRUE	1	1	1	1	2	FALSE	TRUE	No	0	Don't know	FALSE	Freeon was leaking	Repairs	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE	
CAD002381265	Heat pump Tune-up	Yes	Yes	TRUE	2	3	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE	
CAD002367862	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD002586036	Heat pump Tune-up	Yes	Don't know	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	maintenance	General maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE	
CAD000067306	Air conditioner Tune-up	No	Yes	TRUE	99	99	3	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD002299258	Air conditioner Tune-up	No	No	FALSE	3	3	98	3	98	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE	

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CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002191318	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Breakdown. Maint.	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002238321	Air conditioner Tune-up	No	No	FALSE	1	99	99	99	99	FALSE	TRUE	No	0	0	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000272148	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner Portable air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003844085	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	As preventative maintenance to help ensure peak operating	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000374367	Heat pump Tune-up	Yes	Yes	TRUE	3	4	98	4	3	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	replaced air conditioner	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002799276	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To improve home comfort		FALSE	Central air conditioner Air-source heat pump	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003612620	Air conditioner Tune-up	Yes	Yes	TRUE	3	3	99	98	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002754219	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	regular maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000337268	Air conditioner Tune-up	Don't know	Yes	TRUE	1	1	2	2	2	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD003363508	Air conditioner Tune-up	Yes	No	TRUE	2	2	1	99	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	Life of equipment	To save money	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE
CAD000141236	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Yes	No	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000470251	Air conditioner Tune-up	Yes	No	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002446831	Air conditioner Tune-up	Yes	Yes	TRUE	2	99	3	98	4	TRUE	FALSE	No	0	I'm sure my apartment complex did.	FALSE	To save energy		TRUE	Don't know	Electric furnace	FALSE	FALSE	FALSE
CAD002539792	Heat pump Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	maintenance contract	Part of other contracts or warranties	FALSE	Central air conditioner Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE	
CAD000370266	Heat pump Tune-up	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	Yes	No	Don't know	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000140042	Air conditioner Tune-up	No	No	FALSE	1	2	99	99	1	FALSE	TRUE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000342969	Air conditioner Tune-up	Don't know	Yes	TRUE	99	99	99	4	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Ductless or mini-split heat pump	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002660319	Air conditioner Tune-up	Yes	Don't know	TRUE	2	4	2	4	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Don't know		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000065270	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	99	4	FALSE	FALSE	Yes	Don't know	0	FALSE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002537326	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I applied, but I did not receive a rebate	FALSE	broken	Repairs	FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003822296	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	Don't know	0	0	FALSE	It wasn't working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002537375	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Air-source heat pump Electric furnace	TRUE	FALSE	FALSE
CAD000424887	Heat pump Tune-up	Yes	Yes	TRUE	2	3	2	2	2	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	to maintain	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002222023	Heat pump Tune-up	Don't know	Yes	TRUE	2	2	2	99	99	TRUE	FALSE	No	0	Don't know	FALSE	Routine check	Routine maintenance	FALSE	Air-source heat pump	Air-source heat pump	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002343373	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	3	3	3	TRUE	FALSE	No	0	It was confusing	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000492057	Air conditioner Tune-up	No	No	FALSE	99	99	99	99	99	FALSE	FALSE	No	0	0	TRUE	keep in good condition	General maintenance	FALSE	Central air conditioner/Air-source heat pump	Electric furnace	TRUE	FALSE	FALSE
CAD000248781	Air conditioner Tune-up	No	Yes	TRUE	1	98	98	1	2	FALSE	TRUE	No	0	Not sure about this	TRUE	to keep equip working	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002342089	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	to ensure continuing safe operation	Safety	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002252795	Air conditioner Tune-up	Yes	Yes	TRUE	1	99	99	99	99	FALSE	TRUE	No	0	Don't know	FALSE	Don't know		FALSE	Central air conditioner	Don't know/Don't know	TRUE	FALSE	FALSE
CAD003866141	Air conditioner Tune-up	Yes	Yes	TRUE	99	98	4	98	99	FALSE	FALSE	Don't know	0	0	FALSE	previous owner did it regularly	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002181470	Heat pump Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	broke	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002473802	Heat pump Tune-up	Yes	Yes	TRUE	98	98	98	98	98	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Air-source heat pump Gas furnace/boiler	Air-source heat pump Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002782834	Air conditioner Tune-up	Yes	No	TRUE	2	99	99	99	99	TRUE	FALSE	No	0	Don't know	FALSE	preventive maintenance	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD003619088	Heat pump Tune-up	Don't know	No	FALSE	4	4	4	4	98	FALSE	FALSE	No	0	0	TRUE	required by landlord	Part of other contracts or warranties	FALSE	Central air conditioner	Don't know/Electric	FALSE	FALSE	FALSE
CAD003398781	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	1	2	2	FALSE	TRUE	Don't know	0	0	FALSE	To save energy		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000434226	Heat pump Tune-up	No	Yes	TRUE	4	4	4	4	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	Sensor was dirty; temporarily stopped working	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE



Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002619607	Air conditioner Tune-up	Yes	No	TRUE	3	3	2	3	3	TRUE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save money		TRUE	Central air conditioner	Electric furnace	TRUE	TRUE	FALSE
CAD000043637	Air conditioner Tune-up	Yes	Yes	TRUE	1	3	4	1	2	FALSE	TRUE	No	0	Not Qualified	FALSE	Once A Year	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002260831	Air conditioner Tune-up	No	No	FALSE	2	4	4	99	3	TRUE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003872048	Air conditioner Tune-up	Yes	Yes	TRUE	2	3	4	3	1	FALSE	TRUE	No	0	I wasn't sure the tune-up qualified	TRUE	done annually	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003774275	Heat pump Tune-up	No	Yes	TRUE	1	1	1	1	1	FALSE	TRUE	No	0	Wasn't aware of the tax credit	TRUE	To improve home comfort		FALSE	Central air conditioner Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD002199810	Air conditioner Tune-up	No	No	FALSE	1	2	2	99	1	FALSE	TRUE	No	0	0	TRUE	Brother in heating and cooling	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000440388	Air conditioner Tune-up	Yes	Yes	TRUE	2	2	2	2	3	TRUE	FALSE	Yes	Yes	0	FALSE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000079856	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	No problems	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000343301	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	to make sure it continued operating effectively	To save energy	TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002587132	Heat pump Tune-up	No	No	FALSE	1	1	1	1	1	FALSE	TRUE	Yes	Don't know	0	FALSE	To save energy		TRUE	Central air conditioner	Electric furnace	FALSE	FALSE	FALSE
CAD002615762	Air conditioner Tune-up	Yes	Yes	TRUE	4	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	Routine maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000140775	Air conditioner Tune-up	No	No	FALSE	3	2	2	3	3	TRUE	FALSE	No	0	0	TRUE	routine maintenance	Routine maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD002726025	Heat pump Tune-up	No	No	FALSE	1	2	1	1	1	FALSE	TRUE	No	0	0	TRUE	To save energy		TRUE	Window or wall air conditioner	Gas furnace/boiler	FALSE	FALSE	FALSE
CAD000467924	Air conditioner Tune-up	No	No	FALSE	2	2	2	2	2	TRUE	FALSE	No	0	0	TRUE	Maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002203621	Air conditioner Tune-up	No	No	FALSE	3	4	3	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000170509	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	99	98	FALSE	FALSE	Don't know	0	0	FALSE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000232135	Air conditioner Tune-up	No	No	FALSE	4	4	4	4	4	FALSE	FALSE	No	0	0	TRUE	To improve home comfort		FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD003535023	Air conditioner Tune-up	Yes	No	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	It was not working properly	Repairs	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000218047	Air conditioner Tune-up	Yes	Yes	TRUE	98	98	98	98	99	FALSE	FALSE	Don't know	0	0	FALSE	preventative maintenance	General maintenance	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD000475107	Air conditioner Tune-up	Don't know	Yes	TRUE	2	99	99	98	4	TRUE	FALSE	No	0	Didn't know about it	TRUE	Replaced part	Replacement	FALSE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002276489	Air conditioner Tune-up	Yes	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	Don't know	FALSE	Did as part of the maintenance of the building	Part of other contracts or warranties	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD000195965	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	4	99	FALSE	FALSE	Yes	No	Didn't know about it	TRUE	It needed repairs new parts	Repairs	FALSE	Central air conditioner Other (please specify): Floor fan	Gas furnace/boiler	TRUE	FALSE	FALSE
CAD002716032	Air conditioner Tune-up	No	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To make sure everything is okay	General maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002430611	Air conditioner Tune-up	No	Yes	TRUE	1	1	1	99	99	FALSE	TRUE	No	0	Didn't know	TRUE	To save money		TRUE	Central air conditioner	Gas furnace/boiler	TRUE	FALSE	TRUE

Measure Information		Criterion A: Familiarity with at least one Ameren Missouri program,			Criterion B: At least one element of Ameren's program marketing and outreach motivated them to adopt the measure							Criterion D: They had not received a rebate from Ameren, and had not already tried to receive a				Criterion E: They had a valid reason for deciding to install the measure			Criterion F: The adopted measure generated electric savings, not gas			Meeting all criteria	
CadmusAccountKey	Measure	C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs?	C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home ?	Criterion A met? (Yes to C2 or C10)	a) Information about energy savings from Ameren Missouri's marketing or bill insert	b) Ameren Missouri's marketing information from a contractor or retailer	c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri	d) Past participation in an Ameren Missouri energy efficiency program	e) Information from the energy assessment conducted at your home through Ameren Missouri	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)	G18. Did you receive a rebate, discount, or tax credit for the tune-up?	G19. Did you get a rebate from Ameren Missouri?	G20. Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up?	Criterion D met? (qualitative assessment)	G17. Which of the following reasons best describe why you decided to install have the tune-up?	G17 Other Categories	Criterion E met? (qualitative assessment)	Cooling System	Heating System	Criterion F met? (depends on the measure)	Criterion B met for 50% savings? (Max rating was 3)	Criterion B met for 100% savings? (Max rating was 4)
CAD003404308	Air conditioner Tune-up	No	Yes	TRUE	99	99	99	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	A/C has to have freon put in it every year, it's leaking	Routine maintenance	FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE
CAD002410712	Air conditioner Tune-up	Yes	Yes	TRUE	4	98	4	99	99	FALSE	FALSE	No	0	I wasn't sure the tune-up qualified	TRUE	To save energy		TRUE	Don't know	Don't know/Don't know	FALSE	FALSE	FALSE
CAD000155236	Air conditioner Tune-up	Yes	Yes	TRUE	4	4	4	4	4	FALSE	FALSE	No	0	Don't know	FALSE	To improve home comfort		FALSE	Central air conditioner	Electric furnace	TRUE	FALSE	FALSE



## Appendix H2. General Population Survey

January 2018

### A. Introduction

[DISPLAY AMEREN MISSOURI STYLE]

Please enter the 5-digit code from the postcard invitation:

[IF CODE IS INVALID, DISPLAY THE FOLLOWING MESSAGE AND DISPLAY THE FIVE-DIGIT CODE BOX AGAIN; CLOSE SURVEY AFTER FIVE FAILED ATTEMPTS.]

Sorry, the code you have entered is invalid. Please try again or contact Joan Wang at [joan.wang@cadmusgroup.com](mailto:joan.wang@cadmusgroup.com) or (503) 467-7186.

[IF CODE IS VALID, DISPLAY THE FOLLOWING MESSAGE AND CONTINUE SURVEY]

Welcome! Ameren Missouri is conducting its annual study to learn more about how households throughout Missouri use energy. Your responses are very important to us and we will keep them confidential. Complete the survey by **February 1, 2018**, and we will enter you into a drawing for one of five **\$100 Visa gift cards**.

The survey will take you about 15 minutes, and is intended for the person primarily responsible for your household's energy-related decisions (i.e., the person who is responsible for paying the utility bills or selecting new lighting and appliances).

This survey saves your responses automatically and responses will be submitted when you complete the survey. You can stop and then return to the survey at any time by accessing the survey link provided to you on the postcard. Please access the survey from the same device.

### B. Energy Efficiency Attitudes and Barriers

B1. How much energy do you use in your home now compared to five years ago? Would you say...

1. More
2. About the same
3. Less
- 98. Don't know

B2. How important is energy efficiency in your daily activities and when making purchasing decisions?

Would you say...

1. Very important
2. Somewhat important
3. Not too important
4. Not at all important
- 98. DON'T KNOW

B3. Please rate your home's energy efficiency. Would you say it is...

1. Very efficient
2. Somewhat efficient
3. Not too efficient
4. Not at all efficient
- 98. DON'T KNOW

B4. Please rate whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with each of the following statements: **[RANDOMIZE ORDER] [DROP DOWN SELECTION MENU WITH RESPONSE CHOICES: 1= STRONGLY AGREE; 2=SOMEWHAT AGREE; 3=SOMEWHAT DISAGREE; 4=STRONGLY DISAGREE; -98= DON'T KNOW]**

- a) It is important to conserve energy as much as possible
- b) Using energy to keep the home comfortable is my top priority
- c) I would like to save more energy but do not know where to start
- d) I always shop for the lowest prices, even if it takes more time
- e) I have already done as much as possible to save energy in my home
- f) I have tried a few things to save energy, but have not seen any real savings on my utility bills

B5. What are the main reasons you might decide to conserve energy? Selection up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. Reduce energy costs
2. Increase home comfort
3. Protect the environment
4. Increase value of home
5. Other (please specify): \_\_\_\_\_
- 98. Don't know

B6. What are the main reasons you might decide NOT to conserve energy? Selection up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. Already saving as much as possible
2. No need to save on energy cost
3. Equipment is too expensive
4. Equipment is hard to find
5. Equipment doesn't work as well
6. Don't think about it much
7. Don't have time
8. Other family members don't turn off lights/equipment
9. Other (please specify): \_\_\_\_\_
- 98. Don't know

B7. What challenges, if any, do you face in saving energy in your home? Selection up to three options.

**[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. Can't afford it/too expensive
2. Too hard to install/implement
3. Inconvenient/don't have time/too busy
4. Not confident it will save energy/be worth it
5. Afraid it will make home uncomfortable
6. Disruption to home/mess involved with installing improvements
7. Challenges with contractors
8. Don't know where to start
9. No challenges/None
10. Challenges with home construction or age
11. Home is already pretty efficient
12. Other family members are not trying to conserve
13. Other **[SPECIFY: \_\_\_\_\_]**
- 98. DON'T KNOW

### ***C. Energy Efficiency and Program Awareness***

C1. If you wanted to know more about energy saving opportunities, where would you look for information? Selection up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. TV or radio programs or ads
2. Online articles or ads

3. Print articles or ads (e.g., newspapers or magazines)
4. At a retail location
5. Utility bill or other utility direct mail
6. Email from the utility
7. Discussion with a contractor
8. Word of mouth (family, friends, colleagues)
9. Social media
10. Internet searches by you
11. Utility website
12. Other (please specify): \_\_\_\_\_
13. I don't want information about ways to save energy
- 98. Don't know

C2. Have you ever seen or heard of Ameren Missouri's energy efficiency programs? **[RESPONSE REQUIRED]**

1. Yes
2. No
- 98. DON'T KNOW

C3. **[IF C2 = 1]** How familiar are you with the Ameren Missouri's energy efficiency programs?

1. Very familiar
2. Somewhat familiar
3. Not too familiar
4. Not at all familiar
- 98. DON'T KNOW

C4. **[IF C3 = 1, 2, or 3]** Where do you recall having seen or heard about the Ameren Missouri energy efficiency programs? Select up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. TV or radio programs or ads
2. Online articles or ads
3. Print articles or ads (e.g., newspapers or magazines)
4. At a retail location
5. Utility bill or other utility direct mail
6. Email from the utility
7. Discussion with a contractor
8. Word of mouth (family, friends, colleagues)
9. Social media
10. Internet searches by you
11. Utility website
12. Other (please specify): \_\_\_\_\_

-98. Don't know

C5. **[IF C2 = 1]** Are you familiar with the following programs? **[RANDOMIZE ORDER] [DROP DOWN SELECTION MENU WITH RESPONSE CHOICES: 1= YES; 2=NO; -98= DON'T KNOW]**

1. CommunitySavers Program
2. Efficient Products Program
3. Multifamily Efficient Kits Program
4. School Kits Program
5. Heating and Cooling Program
6. Home Energy Report Program
7. Lighting Program

C6. **[IF YES TO ANY OF C5]** Did you participate in any of these programs in the past year? **[RESPONSE REQUIRED]**

1. Yes
  2. No
- 98. Don't know

C7. Have you visited any of the Ameren Missouri energy efficiency program websites within the past year, such as the Efficient Products or Heating and Cooling websites?

1. Yes
  2. No
- 98. Don't know

C8. **[IF C7 = 1]** What information were you looking for on the website? Selection up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. Energy saving tips
  2. Rebates or incentives
  3. Participating contractor or builder
  4. Participating retailers
  5. Where to recycle my CFLs or non-working LEDs
  6. Other (please specify): \_\_\_\_\_
- 98. Don't know

C9. **[IF C7 = 1]** Was the information on the website useful to you?

1. Yes
  2. No (please elaborate why): \_\_\_\_\_
- 98. DON'T KNOW



C10. Are you aware that Ameren Missouri offers rebates and discounts for energy-saving equipment in your home? **[RESPONSE REQUIRED]**

1. Yes
2. No **[SKIP TO D1]**
- 98. Don't know **[SKIP TO D1]**

C11. From what sources did you hear or read about the Ameren Missouri energy-efficiency rebate opportunities? Selection up to three options. **[RANDOMIZE ORDER; ACCEPT UP TO THREE RESPONSES]**

1. TV or radio programs or ads
2. Online articles or ads
3. Print articles or ads (e.g., newspapers or magazines)
4. At a retail location
5. Utility bill or other utility direct mail
6. Email from the utility
7. Discussion with a contractor
8. Word of mouth (family, friends, colleagues)
9. Social media
10. Internet searches by you
11. Utility website
12. Other (please specify): \_\_\_\_\_
- 98. Don't know

### ***D. Lighting***

D1. Have you purchased any CFLs in the last year?

1. Yes
2. No
- 98. Don't know

D2. **[ASK IF D1 = 1]** How many CFLs did you purchase?

D3. **[ASK IF D1 = 1]** What store or stores did you make your purchase from?

D4. Have you purchased any LEDs in the last year? The kind of LED that can replace a traditional screw-in bulb, not LED nightlights, holiday lights, or flashlights.

1. Yes
2. No
- 98. Don't know

D5. **[ASK IF D4 = 1]** How many LEDs did you purchase?

D6. **[ASK IF D4 = 1]** What store or stores did you make your purchase from?

### **E. Cooling**

E1. What type of cooling equipment do you have in your home? **[ACCEPT MULTIPLE RESPONSES; RESPONSE REQUIRED]**

1. Central air conditioner
2. Ductless or mini-split heat pump
3. Air-source heat pump
4. Ground-source or geothermal heat pump
5. Portable air conditioner
6. Window or wall air conditioner
7. Evaporative (swamp) cooler
8. Other (please specify): \_\_\_\_\_
9. None **[SKIP TO SECTION F]**
- 98. DON'T KNOW **[SKIP TO SECTION F]**

E2. **[IF E1 ≠ 9 or -98]** How old is the cooling equipment you previously selected? Please indicate the number of years.

**[Carry forward selected choices]**

Years

## F. Heating

F1. What type of heating equipment do you have in your home? **[ACCEPT MULTIPLE RESPONSES; RESPONSE REQUIRED]**

1. Ductless or mini-split heat pump
2. Air-source heat pump
3. Ground-source or geothermal heat pump
4. Gas furnace/boiler
5. Electric baseboard heating system
6. Electric furnace
7. Other (please specify): \_\_\_\_\_
8. None **[SKIP TO SECTION G]**
- 98. Don't know **[SKIP TO F3]**

F2. How old is the heating equipment you previously selected? Please indicate in number of years.

**[Carry forward selected choices]**

Years

F3. **[If F1 = 7 OR -98]** Is your home heating electric or gas? **[RESPONSE REQUIRED]**

1. Electric
2. Gas
- 98. DON'T KNOW

## G. Potential Spillover

**[IF C6 = 1, SKIP TO SECTION H]**

G1. Is your hot water heater electric or gas? **[RESPONSE REQUIRED]**

1. Electric
2. Gas
- 98. Don't know

G2. Have you or anyone in your household purchased and installed any energy efficient equipment **in the past year?**

1. Yes
2. No **[SKIP TO G15]**
- 98. Don't know

G3. Have you or anyone in your household purchased and installed **energy efficient** versions of the following equipment **in the past year?** **[RANDOMIZE ORDER; ACCEPT MULTIPLE RESPONSES; RESPONSE REQUIRED]**

1. Room air conditioner
2. Room air purifier
3. Pool pump

4. **[IF G1 = 1]** Showerhead
5. **[IF G1 = 1]** Kitchen faucet aerator
6. **[IF G1 = 1]** Bathroom faucet aerator
7. **[IF G1 = 1]** Hot water pipe insulation for your hot water heater
8. Furnace fan with ECM (Electronically Commutated Motor)
9. Filter whistle
10. Heat pump water heater
11. Learning or "smart" thermostat
12. None
- 98. Don't know

G4. How many pieces of each equipment did you install? If you selected *hot water pipe insulation*, please indicate the square footage. **[RESPONSE REQUIRED]**

**[Carry down selected responses]**

Amount

G5. Have you or anyone in your household purchased and installed any other energy efficient equipment **in the past year?**

1. Yes (please specify): \_\_\_\_\_
2. No
- 98. Don't know

G6. **[If G5=1]** How many pieces of **[carry down]** did you install?

**[Text entry]**

**[IF G3 = 12 OR -98 SKIP TO G15]**

**[RESPONSES TO G3 COMBINED MAKE UP THE 'CONSIDERATION SET' FOR THE "SPILLOVER QUESTIONS" (G7-G14). IF RESPONSES ARE MORE THAN THREE, THEN THE CONSIDERATION SET BECOMES A SET OF THREE RANDOMLY SELECTED RESPONSES]**

G7. **[FOR EACH PRODUCT IN "CONSIDERATION SET"]** How do you know the **[INSERT PRODUCT FROM 'CONSIDERATION SET']** is energy efficient? **[RANDOMIZE ORDER; CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]**

1. It's ENERGY STAR-certified
2. The retailer/dealer/contractor told me it was
3. Other (please specify): \_\_\_\_\_
- 98. Don't know **[NOTE: FAIL]**

- G8. **[FOR EACH PRODUCT IN "CONSIDERATION SET"]** Which of the following reasons best describe why you decided to install a **[INSERT PRODUCT FROM 'CONSIDERATION SET']**? **[RANDOMIZE ORDER; CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]**
1. To save energy **[NOTE: PASS] [SKIP TO G10]**
  2. To save money **[NOTE: PASS] [SKIP TO G10]**
  3. To replace failing equipment
  4. Needed to replace anyway
  5. Liked the style
  6. Was ready to update
  7. To improve comfort
  8. Other (please specify): \_\_\_\_\_
- 98. Don't know
- G9. **[If G8 ≠ 1 OR 2]** Which of the following reasons best describe why you chose an energy efficient version of a **[INSERT PRODUCT FROM 'CONSIDERATION SET']** **[RANDOMIZE ORDER; CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]**
1. To save energy **[NOTE: PASS]**
  2. To save money **[NOTE: PASS]**
  3. Liked the style **[NOTE: FAIL]**
  4. It had other features that I liked **[NOTE: FAIL]**
  5. It was the cheapest product available **[NOTE: FAIL]**
  6. It was the only option available **[NOTE: FAIL]**
  7. Other (please specify): \_\_\_\_\_
- 98. Don't know **[NOTE: FAIL]**
- G10. **[FOR EACH PRODUCT IN THE "CONSIDERATION SET"]** Did you receive a rebate, discount, or tax credit for installing the **[INSERT PRODUCT IN "CONSIDERATION SET"]**? **[RESPONSE REQUIRED]**
1. Yes
  2. No **[NOTE: PASS] [SKIP TO G12]**
- 98. Don't know **[NOTE: FAIL] [SKIP TO G14]**
- G11. **[ASK FOR EACH PRODUCT IN "CONSIDERATION SET" IF G10 = 1]** Did you get a rebate from Ameren Missouri? **[RESPONSE REQUIRED]**
1. Yes **[NOTE: FAIL] [SKIP TO G14]**
  2. No **[NOTE: PASS]**
- 98. Don't know **[NOTE: FAIL] [SKIP TO G14]**

G12. **[ASK FOR EACH PRODUCT IN "CONSIDERATION SET" IF C2 = 1 OR C10 = 1]** Why didn't you or your contractor apply for a rebate through Ameren Missouri for the **[INSERT PRODUCT IN "CONSIDERATION SET"]**? **[RANDOMIZE ORDER; CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]**

1. I am still planning to apply **[NOTE: FAIL]**
2. It was confusing **[NOTE: PASS]**
3. Just forgot about it **[NOTE: PASS]**
4. I wasn't sure my equipment qualified **[NOTE: PASS]**
5. I wanted a different model that did not qualify **[NOTE: FAIL]**
6. I applied, but I did not receive a rebate **[NOTE: FAIL]**
7. Other (please specify): \_\_\_\_\_
- 98. Don't know **[NOTE: FAIL]**

G13. **[ASK FOR EACH PRODUCT IN "CONSIDERATION SET" IF G10 = 1 AND G11 = 2]** Which organization did you get a rebate, discount or tax credit from?

**[Text response]**

G14. **[ASK FOR EACH PRODUCT AND ACTION IN "CONSIDERATION SET"]** On a 1 to 4 scale, with 1 meaning "very important", and 4 meaning "not at all important", how important was each of the following elements in your decision to purchase and install a **[INSERT PRODUCT IN "CONSIDERATION SET"]**? **[ADD "Don't know" AND "Not applicable" AS RESPONSE OPTIONS; RANDOMIZE ORDER; RESPONSE REQUIRED]**

- a) Information about energy savings from Ameren Missouri's marking or bill insert
- b) Ameren Missouri's marketing information from a contractor or retailer
- c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri
- d) Past participation in an Ameren Missouri energy efficiency program
- e) Information from the energy assessment conducted at your home through Ameren Missouri

G15. Have you or anyone in your household had a tune-up of your heating or cooling equipment **in the past year?** [RESPONSE REQUIRED]

1. Yes
  2. No [SKIP TO H1]
- 98. DON'T KNOW [SKIP TO H1]

G16. What equipment was tuned up? [CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]

1. Heat pump
  2. Air conditioner
  3. Other (please specify): \_\_\_\_\_
- 98. Don't know [SKIP TO H1]

G17. Which of the following reasons best describe why you decided to have the tune-up? [CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]

1. To save energy [NOTE: PASS]
  2. To save money [NOTE: PASS]
  3. To improve home comfort [NOTE: FAIL]
  4. Other (please specify): \_\_\_\_\_
- 98. DON'T KNOW [NOTE: FAIL]

G18. Did you receive a rebate, discount, or tax credit for the tune-up? [RESPONSE REQUIRED]

1. Yes
  2. No [NOTE: PASS] [SKIP TO G20]
- 98. DON'T KNOW [NOTE: FAIL] [SKIP TO G21]

G19. [IF G18=1] Did you get a rebate from Ameren Missouri? [RESPONSE REQUIRED]

1. Yes [NOTE: FAIL] [SKIP TO G21]
  2. No [NOTE: PASS]
- 98. Don't know [NOTE: FAIL] [SKIP TO G21]

G20. [ASK IF C2 = 1 OR C10 = 1] Why didn't you or your contractor apply for a rebate through Ameren Missouri for the tune-up? [RANDOMIZE ORDER; CHOOSE ONLY ONE RESPONSE; RESPONSE REQUIRED]

1. I am still planning to apply [NOTE: FAIL]
  2. It was confusing [NOTE: PASS]
  3. Just forgot about it [NOTE: PASS]
  4. I wasn't sure the tune-up qualified [NOTE: PASS]
  5. I applied, but I did not receive a rebate [NOTE: FAIL]
  6. Other (please specify): \_\_\_\_\_
- 98. Don't know [NOTE: FAIL]

G21. On a 1 to 4 scale, with 1 meaning “very important”, and 4, meaning “not at all important”, how important was each of the following elements in your decision to get a tune-up? **[ADD “Don’t know” and “Not applicable” AS RESPONSE OPTIONS; RANDOMIZE ORDER; RESPONSE REQUIRED]**

- a) Information about energy savings from Ameren Missouri’s marking or bill insert
- b) Ameren Missouri’s marketing information from a contractor or retailer
- c) Information from colleagues or friends who installed energy efficient equipment and received a rebate from Ameren Missouri
- d) Past participation in an Ameren Missouri energy efficiency program
- e) Information from the energy assessment conducted at your home through Ameren Missouri

### ***H. Customer Demographics***

H1. Thinking about your overall experiences with Ameren Missouri as your utility, how satisfied would you say you are with Ameren Missouri?

- 1. Very satisfied
- 2. Somewhat satisfied
- 3. Not too satisfied
- 4. Not at all satisfied
- 98. Don’t know



H2. How satisfied are you with the energy efficiency information and the rebates available to you by Ameren Missouri?

1. Very satisfied
2. Somewhat satisfied
3. Not too satisfied
4. Not at all satisfied
- 98. Don't know

H3. What type of home do you live in?

1. Single-family home
2. Manufactured or modular
3. Mobile home
4. Row house/townhome
5. Two or three family attached residence
6. Apartment with 4 units or greater
7. Condominium
8. Other (please specify): \_\_\_\_\_
- 98. Don't know

H4. Approximately how many square feet of living space does your home have? Don't include the basement unless it is a space that you consider lived in.

1. Less than 1,000 square feet
2. 1,000 to less than 1,500 square feet
3. 1,500 to less than 2,000 square feet
4. 2,000 to less than 2,500 square feet
5. 2,500 to less than 3,000 square feet
6. 3,000 or more square feet
- 98. Don't know

H5. What year was your home built?

1. After 2012
2. 2009-2012
3. 2005-2008
4. 2001-2004
5. 1980-2000
6. Before 1980
- 98. Don't know

H6. Do you own or rent this residence?

1. Own
2. Rent

-98. Don't know

H7. Is your home occupied...

1. Year round
2. On a seasonal basis/vacation home
- 98. Don't know

H8. What is the highest level of education that you have completed?

1. Less than a high school degree
2. High school degree
3. Technical/trade school program
4. Associates degree or some college
5. Bachelor's degree
6. Graduate/ professional degree, e.g. J.D., MBA, MD, etc.
7. Professional certification, e.g. CPA, CNP, etc.
- 98. Don't know

H9. Which of the following categories includes your household's total annual income before taxes?

1. Less than \$10,000
2. \$10,000 – \$14,999
3. \$15,000 – \$19,999
4. \$20,000 – \$29,999
5. \$30,000 – \$39,999
6. \$40,000 – \$49,999
7. \$50,000 – \$59,999
8. \$60,000 – \$74,999
9. \$75,000 – \$99,999
10. \$100,000 – \$124,999
11. \$125,000 – \$149,999
12. \$150,000 or more
13. Prefer not to say

Thank you for taking the survey. Your response has been recorded and we have entered you into the drawing for one of five \$100 gift cards.

If you are selected to receive one of the five gift cards in the drawing, the gift card will be mailed to you at the same address written on the postcard you received, by February 28th, 2018.