Freeridership and Spillover

The results of the freeridership-related questions were analyzed using a decision matrix (see the above section in this report 'Determination of Net Savings), and 20 percent of surveyed participants who installed common-area measures were determined to be freeriders. This result was applied to program gross savings to determine program net savings.

Although spillover was not quantified and applied as an adjustment to program savings, Cadmus asked a short battery of questions to determine whether any spillover effects appeared to have occurred. Fifty percent of all participants said they installed other energy-efficient equipment without incentives or rebates. Within this group, 55 percent said they installed ENERGY STAR® equipment. A large proportion (32 percent) did not know whether the equipment they had installed was ENERGY STAR® labeled. Also within this group, 50 percent rated the program's influence as an 8 or higher, suggesting the program was very influential in their decision to install additional efficient equipment. Eighteen percent of those who had installed equipment without incentives said they had participated in utility programs other than the multi family program.

Building Characteristics

Respondents were asked to describe the characteristics of their building or complex. Forty-three percent of participants overall had just one building in their complex. Twelve percent had 13 or more buildings. The number of units owned or managed ranged from three to 399. Half of the respondents could not estimate the approximate square footage of their building/complex. For those that could make this estimate, square footage ranged from a minimum of 65,924 square feet to a maximum of 430,053 square feet. Respondents were given two options to estimate the square footage of their common areas: they could provide the estimate in square feet or as a percent of the total. These results, along with additional building characteristics, are summarized in Table 15.

Table 15. Characteristics of Participant Multifamily Buildings

Characteristic	Average	Minimum	Maximum
Number of buildings in complex (n=42)	7	1	40
Units in multifamily complex (n=41)	92	3	399
Approximate square footage of building/complex (n=21)	65,924	1,700	430,053
Common-area amount in square feet (n=12)	2,079	0	10,800
Common-area amount as a percentage (n=29)	18%	0%	50%
Approximate age of building complex (n=41)	30	1	82

Additionally, 48 percent of multifamily building participants reported that their building or complex uses electric energy only, with 52 percent reporting that they use a mix of gas and electric. All but one of the participants using gas reported that they purchase their gas from Ameren Illinois.

Stakeholder Interview Findings

Cadmus conducted interviews with three program stakeholders as identified in Table 16. The interviews focused on three general program areas: marketing, the audit and installation process, and payments and invoicing. Interviewees were also asked to give their opinions about the

program in general. Interviews were conducted in July and September of 2010, and followed the interview guide attached in Appendix C.

Table 16. Stakeholder Interviewees

Title	Organization
Program Manager	Ameren Illinois
Program Manager	CSG
Sales Representative	Lighting Company

Each person interviewed had quite different daily tasks, ranging from a focus on managing others, to implement the program, to having a more hands-on role in program delivery, to being involved in all aspects of the sales process. The breadth of interviewee involvement with the project provided a multifaceted examination of the program's functioning.

When asked about the program's primary goals, each interviewee had a slightly different perspective. One manager described the goals as '*find ways to help customers save money, save energy, don't waste energy, help them manage bills and energy usage.*' The other manager characterized the goals as '*achieve savings goals mandated by the legislature and improve the energy efficiency of housing stock in the multifamily sector.*' The sales representative provided the most direct response: '*To reduce kilowatt usage - that is the primary goal of the program so that is what we try to help them do.*'

Marketing

All stakeholders have tried various methods of marketing the program. There was a general consensus that cold calling was a very effective way to gain new business; both program managers thought of cold calling as the most effective method; the customer feedback cited above confirms this perception. The sales representative saw cold calling as effective, but also viewed referrals from other facilities as a very good way to get new business. The program managers did not view their efforts to get new business as marketing per se, possibly given their reliance on cold calling.

The sales representative mentioned regularly putting out flyers offering free energy analysis audits. These flyers would be provided by Ameren Illinois, affixed with the lighting company's logo. After sending out the flyers, the sales representative would do follow-up calling in the neighborhood. Once given permission to visit, they would typically provide free energy analysis, offer recommendations, and take care of all paperwork associated with the incentives, if that is the customer's preference.

One program manager is very optimistic about the program's future participation potential. He thinks the market is not yet near saturation. He also thinks facilities catering to middle and lower income residents have the most potential. These typically have less maintenance staff, and may be less likely to have new efficient technologies installed. Newer apartments are better staffed, and have higher quality equipment and correspondingly less energy saving potential.

Energy Audits and Installations

There were some differences among stakeholders in determining site eligibility. One program manager said he would look mainly at technical potential, and reported that they try to stick with higher savings projects. He specifically mentioned CFLs and showerheads, and suggested they might not do an all-aerator project, as the savings would not be great enough. The sales representative and other program manager were concerned mostly with determining that the prospect met all of the program qualification requirements.

Interviewee perspectives on custom audits also differ. One program manager said that custom audits were done: if the property owner wants to upgrade, the account manager will walk through the building with the property owner or property manager, making suggestions about HVAC or air sealing (for example). The other program manager reported that custom audits were not done, that the process was all walk through, and that the property owner/manager is either interested or not. The sales representative had a very specific definition of a custom audit - he said it would be triggered by a lot of incandescent and/or exterior lighting, and his example was '*if we take 50 fixtures out and put in 20 we would have to go in under the custom program.*'

Going forward, Ameren Illinois plans to add additional energy-saving measures and phase out the pipe wrap measure, since it is considered to be too time consuming.

Payment and Invoicing

The sales representative said they had a 30 day net policy on their invoices, and were usually paid within 60 days. The other staff personnel were less specific about payment and invoicing timing, but one of them did some research after the interview and contacted us to inform us that he found it was generally a two week process to pay an invoice. There were no reported problems with payments or invoicing, beyond normal discrepancies that have been resolved easily with a little research and telephone calling.

Overall Program

There was general consensus among the interviewees that the program is doing well. One program manager said this was the only program they'd had where there was no negative feedback and quite a bit of positive feedback from property managers about the account managers. The other program manager said they had already hit their goals and had a full pipeline of work in the coming months. The sales representative also was optimistic about the program in general; he thought that incentive levels should remain the same (without decreases) to maintain public interest in the programs. He also expressed some general concerns about the slow economy and its potential impact on demand, but said the program itself was a good one. All three stakeholders were clear that the program overall was useful, successful, and is accomplishing its main goals of promoting and achieving energy efficiency.

Program Material Review

Cadmus reviewed the documents that a customer would encounter in applying for incentives for common-area measures. These include: the multifamily common-area lighting program application documents, program ally list, guidelines to qualifying measures, terms and conditions of the program overview, and the request for reservation of incentive funds.

The Multifamily Common-Area Lighting Program Ally List can be used by customers to locate participating contractors to install the program materials. This list is included in Appendix F. Since the number of participants using contractors to install common measures has been low, the ally list hasn't been used much. However, this may change in the future as Ameren Illinois adds measures to the list and more buildings participate. The list includes the company name, address, telephone number, contact name, email address, and/or Website address, in addition to the areas they each serve in Illinois.

The Multifamily Common-Area Lighting Program Guidelines to Qualifying Measures assists customers in deciding which qualifying measures to install in their building. Measures are divided into different lighting categories to simplify the selection process. Each lighting category lists the type of measure, incentive amount, and description of incentive (specifications, typical applications, and a photographed example of a qualifying measure).

The Multifamily Common-Area Lighting Program Overview presents a program summary. This overview gives customers an understanding of the program qualifications, defines what a common area is, defines the energy-efficient measures included in the program, the incentive amounts, and outlines the estimated long-term savings of installation for certain measures. This information is then followed up with a step-by-step outline of the application process.

The purpose of the material review was to evaluate the ease of understanding, correct contact data, and ease of use of Website address links. There were several problems with the documents, as discussed below.

Several inaccuracies associated with individual allies existed on the program ally list:

- Action Electric - the E-mail address is for Lisa, but the contact should be Rick VanDynHoven
- Aschinger Electric - the Website information is not valid
- Budget Lighting – the Website has a different address and contact number than what is listed on the form
- Witte Electric - the Website information is missing

One of the issues encountered was ease of use with the Website address links. The address links for the Consortium for Energy Efficiency (cee1.org) and Act On Energy - both of which are included on the guidelines to qualifying form - were not easily navigated. The CEE1 Website is referred to as a resource to learn about T8 lighting options. The Website has a Multifamily Housing area, but that Web page is no longer current. There are other areas on the Web page for consumers to learn about lighting; however, it is not clear whether the residential or the commercial program would be the appropriate link. Only after the consumer goes through both Web pages is it clear that the commercial Webpage has the needed information.

The Act On Energy Website is not easily navigated. The home page has links for home, business, and energy saving tips. While the multifamily program is listed under "business," there are not any direct links to multifamily programs on the first linked Web page. Many multifamily building managers have competing demands on their time. Streamlining program information and increasing ease of use will benefit those who are looking for multifamily program resources.

Evaluability Assessment

A program evaluability assessment ensures that the program's data collection and organization will enable future evaluations to be conducted with ease and accuracy. Cadmus conducted this assessment while reviewing the database and associated documentation provided.

Last year Cadmus reviewed what data were being collected for use in evaluations; this year Cadmus examined the finer details of the data collection and transfer process for reducing sources of error. Our review, summarized in Table 17, shows that the program could benefit from improved QA/QC practices.

Table 17. Evaluability Assessment of Data Collection Practices

Industry Best Practice	Multifamily Program/ Subcontractor Practice?	Cadmus Comments
Consistent document labeling/naming convention	No	
Electronic records include data on individual units	No	
Electronic records show cumulative results per facility	No	Currently database bundles measures by type and installation date, with corrections entered as separate items
Electronic records include savings calculations	Yes	
Use of FTP for secure transfer of customer data	Yes	
Clear and legible handwritten forms	No	Many forms were difficult to read, multiple edits made on the same form are unclear
All fields completely filled out on forms	No	

5. Conclusions and Recommendations

Conclusions

Participation in the PY2 program is up considerably from PY1; however, similar to PY1, less than 10 percent of participants install common-area measures. As in many programs, participation is limited by the slow economy and barrier of the upfront investment needed to receive incentives. Cadmus' NTG analysis found very low freeridership on the common-area measures, indicating that the incentives are effective in encouraging investment.

Stakeholders and participants are both reportedly satisfied with the program, although several of the common-area participants felt it was difficult to identify equipment qualifying for rebates. While the trade allies would be helpful to participants, customers are not required to use trade allies for common-area lighting installations, and therefore most identified and installed common-area measures on their own.

Cold calling appears to be the most effective marketing method, as both the participant survey and the stakeholder interviews identified it as effective in helping customers learn about the program. There was a notably wide variability in facility size among the owner-participants (from three to nearly 400 units).

There appeared to be confusion among the program stakeholders as to project eligibility and how the audit process works. Better definition of program approaches and post-installation verification procedures may improve results.

The participant documentation process needs improvement, as missing and illegible forms made it difficult to verify installations and savings. The program documentation and Website was also difficult to navigate and contained inaccuracies.

Table 18 summarizes and compares the PY2 results to PY1 using NTG ratios calculated in each respective year.

Table 18. PY2 Multifamily Program Gross and Net Results

Program Year	Gross kWh Savings	Gross kW Savings	Net kWh Savings	Net kW Savings
PY2	2,805,868	272	2,741,949	262
PY1	1,073,094	107	816,654	82

Recommendations

Cadmus identified the following recommendations for improving the program in PY3 and beyond.

- ***Put more emphasis on marketing for common-area measures.*** If more common-area installations are complete, the program will be more cost-effective and leverage the marketing and site visit dollars invested. While it is understandable that the upfront investment and concerns about the economy are participation barriers, additional marketing could overcome this resistance. Follow-up calls by CSG or leads to trade allies

could be one marketing approach. Also consider making formal presentations to the building owners, emphasizing cost savings and other benefits, such as "green" marketing. Some common-area participants suggested that they had difficulty locating eligible equipment. The eligible measures form could be made more "customer friendly" and offer suggestions of where and what products to purchase.

- ***Focus on defining the program so all stakeholders have the same understanding of how the program works and how to optimize eligibility. .*** It was apparent from the interviews that stakeholders did not all have the same understanding of how the program operates, and specifically how eligible customers are identified and optimized. Better definition could provide some program benefits and ensure their proper use. Given the wide variety of facility size among participants, Ameren Illinois could evaluate whether there are special efficiencies or advantages to concentrating on a specific type, size, or age of building complex to promote the program.
- ***Change applications, materials request, and post-installation forms to an electronic format***. The current documents were confusing due to penmanship, notes entered on sides of sheet, rows not totaled, and items being crossed out - which decrease the evaluability of the program. Moving to an electronic, Web-based application will increase accuracy and efficiency.
- ***Updating the Website address links for program information***. The CEE1 Website and the Act on Energy Website have valuable information for consumers; however, both sites are not easily navigated. When listing the CEE1 Website as a resource for additional information, include what page the resource is on. This will increase ease of use. For the Act On Energy Website, include a heading for multifamily program information on the first page of the website. Again, this will increase usability and perhaps increase program participation.
- ***Implement a naming convention for program participant files.*** Multiple methods were used when naming program files. In some cases, the multiple naming conventions made evaluating the documents arduous. The method that was most useful was site id_dwelling name. This naming convention allowed Cadmus to quickly match sites with post review information, thus increasing our evaluation efficiency.
- ***Implement ongoing quality control checks for the program documentation.*** Due to initially missing and illegible data forms identified in our documentation review process, Cadmus recommends that Ameren Illinois and CSG develop a quality control system that ensures all the forms are in place and legible before rebates are paid or results are counted in the tracking database.

Appendix A. Document Review Protocol

This protocol describes how to complete the document review effort for the Ameren Illinois Multifamily Program. There are three distinct areas to review:

1. The One time review includes items that are overarching and require a thorough reading of program materials. This review is designed to address inconsistencies and program mechanics.
2. The Common-Area Review focuses on the common-area rebate program and includes a review of the materials submitted to the program and the associated database.
3. The In-Unit Review focuses on the in-unit portion of the program and includes a review of the materials submitted to the program and the associated database.

This protocol is to be used in conjunction with the Document Review Database (doc Review Database 02AUG2010.xls). Please review program forms for the participating buildings from the sample, which can be found in the Ameren multifamily folder. Enter the results into the spreadsheet using the instructions in this protocol.

There are two types of multifamily measures: common-area measures and in-unit measures. This program provides an incentive for common-area measures and free efficiency upgrades for individual units. Any errors or areas for improvement in program documentation should be recorded along with noting which document the error or area in question is located.

1. One time review items

1. Begin the document review by reading the multifamily common-area lighting program overview.
   - Ensure that the dates, Web address, and other numbers are correct.
   - If the document refers to a Web page, check that the page exists and is functional.
   - Note any inconsistencies or errors in the Errors Found tab, including the name of the program material where it was found.
2. Check the program ally list and ensure the Websites are functional.
3. Check the "Guidelines to Qualifying Measures" document and check for consistency with other documents.
4. Review program documents for logic and consistency. Again, any inconsistencies or errors should be documented in the Errors Found tab, including the name of the program material where it was found.
5. Review the Terms and Conditions language.
6. Review the Common-Area Lighting Program Overview.
7. Review the fields in the forms.

2. Common-Area Review

1. Check the Request for Reservation of Incentive Funds and Terms and Conditions forms for completeness. If these are completed, please input "complete" into the database in

columns N-O. If information in missing input "incomplete," if the form is missing then input "missing." Any inconsistencies or errors found in the forms should be documented in the Errors Found tab. Please include the name and section number of the program material where the error was found.

a. Forms Complete = Complete

b. Input missing = Incomplete

c. Form is missing = Missing

2. Check the following forms:

   - Multifamily Common-Area Lighting Incentive Funds Application form should be checked for complete data entries.
   - Check the cut sheets and invoices to see if they match what was claimed to have been installed on the Multifamily Common-Area Lighting Incentive Funds Application, on the "summary of project as completed" pages.

     There may be multiple sheets for each property due to multiple batch installations, be sure to add them together to get the total number of measures installed at that property.
   - Record the total quantity of each measure installed for the whole program year in the "document review database" (columns P-U).
   - In addition to quantity of measures, compare the "summary of project as completed" forms to the "common area" tab in the "document review database" workbook. Ensure the following elements match:
     - Address
     - Existing wattage
     - New wattage
     - Location
     - Operating hours

   Again, any inconsistencies or errors should be documented in the Errors Found tab, including the name of the program material where it was found.

3. In Unit Review

1. Check the Program Participation Agreement and Materials Request forms for complete data entries. If these are complete, please input "complete" into the database (columns D-E) in the appropriate cell. If information in missing input "incomplete," if the form is missing then input "missing."

   a. Form complete = Complete

   b. Data Missing= Incomplete

   c. Form Missing = Missing

2. There may be more than one In-Unit Post Installation Data Collection Form per property. Please total up each of the measures across all data forms and report the total quantity installed during the 2009 year in the "document review database" for that property (columns F-L).

Appendix B. Participant Survey Instrument

Ameren Illinois
Residential Multifamily Program
Participating Owner Survey Codebook

NOTE:
1. Open-ended responses are captured in the file "Ameren IL MF Open Ends.xls".
2. Questions were asked of all respondents unless indicated otherwise.
3. A code of -8 means the respondent answered, "Don't know".
4. A code of -9 means the respondent Refused to answer the question.

Introduction and Confirmation

Q1 Our records show that your building took part in Ameren's ActOnEnergy Multifamily program where you received free light bulbs, water saving products, or other equipment, is that correct?

1 Yes

2 No *[Terminate]*

Q2 First, I want to confirm what you received from the program. Did you receive free light bulbs and /or free water saving products to install in individual units in your building?

1 Yes

2 No

-8 Don't Know

-9 Refused

Q3 Did you receive incentives for installing other energy efficiency equipment in your common areas?

1 Yes *[If also answered "no" to Q2, skip to "Common Area Incentives", else continue]*

2 No *[If also answered "no" to Q2, thank and terminate, else continue]*

-8 Don't Know

-9 Refused

Q3a [If Q2 <> 1 and Q3 <> 1] What did you receive through the program?

1 Energy efficient measures for only tenant apartments

2 Energy efficient equipment for only common areas

3 Energy efficient equipment for both tenant and common areas

4 None of the above

-8 Don't Know

-9 Refused

In Unit Measure Questions

Q4 I would like to talk to you about the free light bulbs and water saving items you received for your individual units as part of this program.

Our records indicate that you received [LIST FREE MEASURES] is this correct?

1 Yes *[GO TO Q5]*

2 No

-8 Don't Know

-9 Refused

Q4_2 [If Q4 = No] What did you receive?

1 Mentioned

0 Not mentioned

Q4_2_1 Compact Fluorescent Light bulbs

Q4_2_2 High Efficiency Showerheads

Q4_2_3 High Efficiency Faucet Aerators

Q4_2_4 Pipe Insulation

Q4_2_5 Other *[Specify]*

Q5 [ASK FOR EACH MEASURE FROM Q4] Did you install the [Measures]?

1 Yes

2 No

3 None of any measure *[PROBE: Why not?]*

-8 Don't Know

-9 Refused

Q5_1 CFLs

Q5_2 Showerheads

Q5_3 Faucet Aerators

Q5_4 Pipe Insulation

Q5_1 How many did you install?

__ [Record qty/length in feet]

	-8	Don't Know
	-9	Refused
Q5_1_1	CFLs (Quantity)	
Q5_1_2	Showerheads (Quantity)	
Q5_1_3	Faucet Aerators (Quantity)	
Q5_1_4	Pipe insulation (Length in feet)	
Q6	What are the main reasons you decided to install [Measures] in the individual units? *[DO NOT READ]*	
	1	Mentioned
	0	Not mentioned
	_1	It was free
	_2	To help my tenants
	_3	To save energy
	_4	To lower energy bill, save money on bills
	_5	Environmental reasons
	_6	Liked the make/model/design
	_7	To replace broken equipment
	_8	Part of a remodel or renovation
	_9	Recommended by a family or friend
	_10	Other *[Specify]*
	_11	Don't Know
	_12	Refused
Q6_1	CFLs	
Q6_2	Showerheads	
Q6_3	Faucet Aerators	
Q6_4	Pipe Insulation	
Q7	[IF PROVIDED MORE THAN 1 REASON IN Q6] What was the most important reason? *[DO NOT READ]*	
	1	To save energy
	2	To lower energy bill, save money on bills
	3	Environmental reasons
	4	Liked the make/model/design

5 To replace broken equipment

6 Part of a remodel or renovation

7 Recommended by a family or friend

8 To get the rebate

9 Other *[Specify]*

-8 Don't Know

-9 Refused

Q7_1 CFLs

Q7_2 Showerheads

Q7_3 Faucet Aerators

Q7_4 Pipe Insulation

Q8 [SKIP IF Q3=YES] Did you know that Ameren also offers incentives for installing certain equipment such as lighting equipment in building common areas?

1 Yes

2 No

-8 Don't Know

-9 Refused

Common Area Measure Questions

Q9 [IF Q3=NO, SKIP TO Q12] Now I would like to talk to you about the energy efficiency items you installed in your common areas for which you received an incentive from Ameren.

Our records show you received an incentive for installing [LIST ALL COMMON AREA MEASURES] in [date (month/year)]?

Is that correct?

1 Yes

2 No, measure(s) are incorrect. *[PROBE: What measures were installed?]*

3 No, date is incorrect. What date was it?

4 No, did not receive an incentives, but I've applied for them

5 No I did not apply for any incentives *[TERMINATE]*

-8 Don't Know *[TERMINATE]*

-9 Refused *[TERMINATE]*

Q10 What are the main reasons you decided to install the energy efficient lighting in the common area of your building? *[DO NOT READ, ACCEPT MULTIPLE ANSWERS]*

1 Mentioned

0 Not mentioned

Q10_1 To save energy

Q10_2 To lower energy bill, save money on bills

Q10_3 Environmental reasons

Q10_4 Liked the make/model/design

Q10_5 To replace broken equipment

Q10_6 Part of a remodel or renovation

Q10_7 Recommended by a family or friend

Q10_8 To get the rebate

Q10_9 Other *[Specify]*

Q10_10 Don't Know

Q10_11 Refused

Q11 [IF PROVIDED MORE THAN 1 REASON] What was the most important reason?

1 To save energy

2 To lower energy bill, save money on bills

3 Environmental reasons

4 Liked the make/model/design

5 To replace broken equipment

6 Part of a remodel or renovation

7 Recommended by a family or friend

8 To get the rebate

9 Other *[Specify]*

-8 Don't Know

-9 Refused

Marketing

Q12 Now I'd like you to think back to when you first learned about Ameren/s ActOnEnergy Multifamily program, how did you first learn about it? *[DO NOT READ, MULTIPLE RESPONSES OKAY]*

Q12_1 Cold call / Someone knocked on my door

Q12_2 I received a Letter about the program

Q12_3 Information left at my apartment building

Q12_4 Presentation at neighborhood meeting

Q12_5 Other presentation *[Specify]*

Q12_6 Website *[GO TO 13B]*

Q12_7 Friend or family

Q12_8 Contractor

Q12_9 Other *[Specify]*

Q12_10 Don't Know

Q12_11 Refused

Q13 [FOR EACH IN Q12] On a scale of 0-10 where 0 is not at all informative and 10 is very informative, how informative was the [INSERT APPROPRIATE TYPE FROM 12] in describing the program?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q13a On a scale of 0-10 where 0 is not at all motivated and 10 is highly motivated, how motivated were you to participate in the program as a result of the information you received?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q13b_1 [If Q12 = 6] On a scale of 0-10 where 0 is not at all easy and 10 is very easy; please rate the ease of finding information on the website?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q13b_2 [If Q12 = 6] On a scale of 0-10 where 0 is not at all informative and 10 is very informative, how informative was the information presented on the website?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Application Process

Q14 [IF Q3=NO, SKIP TO Q25] The next few questions focus on your experience in completing the application to receive incentives for common area improvements.

On a scale of 0-10, where 0 is not at all easy and 10 is very easy, how easy was it to fill out the application for incentives?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know *[IF 5 OR >, SKIP TO 17]*

-9 Refused

Q15 [If Q14 above is <5] What was difficult in filling out the incentives application?

[RECORD RESPONSE]

Q16 [If Q14 is <5] Were you able to get the help you needed?

1 Yes

2 No

3 Didn't ask for help/figured it out for myself

-8 Don't Know

-9 Refused

Q17 Did you feel your incentive arrived in a reasonable amount of time?

1 Yes *[GO TO Q20]*

2 No

-8 Don't Know

-9 Refused

Q17_2 [If Q17 = 2] How long did it take?

[RECORD RESPONSE]

Q18 Was there an issue to resolve with Ameren about the incentive?

1 Yes *[Probe: What was it?] [GO TO 19]*

2 No *[GO TO 20]*

-8 Don't Know *[GO TO 20]*

-9 Refused *[GO TO 20]*

Q19 On a scale of 0-10 where 0 is not at all easy and 10 is very easy, how easy was it to resolve the issues?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Purchase and Installation Information

Q20 Now I would like you to think about the purchase and installation of the incentivized measures (in other words, the common area lighting measures for which you received a rebate or money back).

On a scale of 0 to 10, where 0 is very easy and 10 is not at all easy, how easy was it to find a energy efficient lighting that qualified for Ameren's incentives?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q21 Did you or your staff purchase and install the energy efficient lighting yourselves or did you hire a contractor?

1 Ourselves

2 Contractor *[GO TO 23]*

-8 Don't Know

-9 Refused

Q22 [If Q21 = 1] On a scale of 0-10 where 0 is very easy and 10 is not at all easy, how easy was it to find the energy efficient lighting you needed?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q22A Did a sales person help you decide on the energy efficient lighting to purchase?

1 Yes *[GO TO Q25]*

2 No

-8 Don't Know

-9 Refused

Q23 [If Q21 = 2] On a scale of 0-10, where 0 is not at all easy, and 10 is very easy, how easy was it to get the energy efficient lighting installed?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q24 Did a contractor help you select the energy efficient lighting that you purchased?

1 Yes

2 No

-8 Don't Know

-9 Refused

Satisfaction

Q25 Now I would like to ask some questions about your satisfaction with the program and the energy efficiency items you installed.

Overall, on a scale of 0 to 10, with 0 being not at all satisfied, and 10 being very satisfied, how satisfied are you with your participation in the program?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q25A Why did you give that response?

[RECORD RESPONSE]

Q26 On a scale of 0 to 10, with 0 being not at all satisfied and 10 being very satisfied, how satisfied are you with the [MEASURE]?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q26IU_1 CFLs

Q26IU_2 Showerheads

Q26IU_3 Faucet Aerators

Q26IU_4 Pipe Insulation

Q26COM [If common area measures installed] Energy efficient lighting you installed in common areas?

Q26A [IF Q26<5] Why did you give that response?

[RECORD RESPONSE]

Free Ridership and Spillover

Q27 I have just a few questions about your purchase decisions for the energy efficiency items installed in your common areas.

Prior to learning about the program, would you have installed energy efficient lighting without this program??

1 Yes

2 No

-8 Don't Know

-9 Refused

Q28 Prior to installing the energy efficient lighting had you ever purchased the same energy saving item for installation anywhere in your complex?

1 Yes

2 No

-8 Don't Know

-9 Refused

Q29 [IF Q28=1] Did the energy efficient lighting you purchased before have the same level of efficiency, or was it more efficient, or less efficient than what was just installed through the program?

1 Same efficiency

2 More efficient, or

3 Less efficient

-8 Don't Know

-9 Refused

Q30 If the rebates for energy saving energy efficient lighting had not been available through the program, would you have purchased and installed the same amount of energy efficient lighting on your own, or would you have installed fewer or none?

1 Same

2 Fewer

3 None

-8 Don't Know

-9 Refused

Q31 Would you have purchased and installed the energy efficient lighting at a later time if Ameren's Multifamily program were not available?

1 Yes

2 No

-8 Don't Know

-9 Refused

Q32 Was it in your budget to replace [measures] before you received rebates for them through Ameren's program?

1 Yes

2 No

-8 Don't Know

-9 Refused

Q33 Since participating in the Ameren's multifamily program, did you install any other energy efficient equipment or appliances without incentives or rebates from your utility or other energy organizations?

1 Yes

2 No *[SKIP TO Q37]*

-8 Don't Know

-9 Refused

Q33_1 What did you purchase or install?

[RECORD RESPONSE]

Q34 Were any of the equipment or appliances ENERGY STAR rated?

1 Yes *[Probe: Which ones?]*

2 No

-8 Don't Know

-9 Refused

Q35 Overall, on a scale of 0-10 where 0 is not very influential and 10 is very influential how much did participating in Ameren's multi-family program influence you to install this other energy efficient equipment?

_____ [*RECORD RESPONSE (0-10)]*

-8 Don't Know

-9 Refused

Q36 Have you participated in any other Ameren or other utility energy efficiency programs?

1 Yes [Probe: What did you get?]

2 No

-8 Don't Know

-9 Refused

Program Improvement

Q37 What do you think is the greatest benefit of participating in Ameren's multifamily program?

[RECORD RESPONSE]

Q38 As a participant what do you see as strengths of this program?

[RECORD RESPONSE]

Q39 Do you have any suggestions to improve the program?

[RECORD RESPONSE]

Classification

Q40 Now I have just a few more questions about your building or complex that participated in the program.

How many buildings make up your multifamily complex?

_____ [*RECORD RESPONSE]*

-8 Don't Know

-9 Refused

Q41 How many units are in the multifamily [building/complex]?

_____ [*RECORD RESPONSE]*

-8 Don't Know

-9 Refused

Q42 What is the approximate square footage of the [building/complex]

_____ [*RECORD RESPONSE]*

-8 Don't Know

-9 Refused

Q42_1 How much of that is common area?

1 Answer in sq ft

2 Answer in percentage

-8 Don't Know

-9 Refused

Q42_1a [Record Square Feet]

Q42_1b [Record Percentage]

Q43 What is the approximate age of your [building/complex]?

_____ [*RECORD RESPONSE]*

-8 Don't Know

-9 Refused

Q44 Is your building….?

1 All Electric

2 Gas and Electric?

3 Some other combination of energy sources [Specify]

-8 Don't Know

-9 Refused

Q44_1 Do you purchase gas from Ameren?

1 Yes

2 No

-8 Don't Know

-9 Refused

R1 Thank you that completes the survey. I just have one more question.

Within a few weeks we will be offering people $50 to allow a trained technician to visit their apartment complexes. The visit should take about 30-45 minutes, during which time a technician will gather and verify information on the lighting/water-saving equipment installed through the program.

By saying yes, you are simply agreeing to be re-contacted to set up an appointment. During the visit, there will be no attempt to sell you anything.

Would you be interested in being a part of this type of visit?

1 Yes

2 No [Say: THANK YOU VERY MUCH FOR YOUR TIME]

-8 Don't know

Appendix C. Stakeholder Interview Guides

Ameren Illinois Multifamily Program Stakeholder Interview Guide

Thank you for taking the time to talk with me today about the program.

As you know, The Cadmus Group, Inc., is evaluating the program on behalf of Ameren Illinois. The purpose of this interview is to gather information on program processes, operations, and activities since the program's inception. Please note that this is not an audit, and that your comments will be kept confidential. Our goal is to create a complete description of the program from all perspectives so that we can identify what is working well and what can potentially be improved. Because of your role in program implementation, your perspective is very important to us, and we appreciate your taking the time to share it with us.

We expect this interview to take less than an hour of your time.

Introduction

1. What is your role in the Ameren Illinois Multifamily program? (probe for: title, responsibilities, number of staff supervising/assisting) For how long have you had this role?
2. Which program aspects (design, marketing, delivery, administration, customer response) are you most familiar with?
3. What do you believe are the program's primary goals?
4. In general terms, will you please walk me through the delivery of Ameren Illinois' Multifamily Program? (probe for marketing, contact with customers, scheduling and conducting audits, supplying recommendations to landlord, installing measures, any follow-up, incentive applications, and inspections)

Program Delivery

Marketing

5. What is your strategy for identifying multifamily complexes to target?
6. What methods have you used for marketing the program to potential participants (phone calls, canvassing, business associations, or other)?
7. How effective would you say those methods have proved to be?
8. What marketing materials do you use? (ask for copies of marketing materials)
9. How effective are these marketing materials?
10. Do you market this program to contractors and trade allies?
11. Did you use contractors to implement the program this year?

Energy Audits and Installations

12. How is a site determined to be eligible for the program?
13. Did the concept of recommending energy efficiency upgrades to participants get implemented in the last year. (probe for Shell and HVAC)
14. What would trigger a custom audit?
15. How many CFLs were installed in each apartment?
16. All the common area measures were lighting measures, do you know why there were no additional measures? Were they not offered?
17. Is it still true that the account manager shows the maintenance manager how to install the measures the first day?
18. Are installations inspected after completion?
    a. If yes, by whom?
19. How is data collected on participants and the participating buildings? Have there been any difficulties with data tracking?
20. What other reporting is required by the Program? How often are these reports submitted?
21. Do you feel the incentives offered by the Program are sufficient for engaging participants?
22. Are you satisfied with the range of equipment that is eligible for incentives?
23. Are there measures that you feel would be beneficial to many buildings, but are not adopted by participants? (Probe for Shell and HVAC measures.)

Payment and Invoicing

24. How is CSG paid for completed projects?
25. Generally, how long after CSG submit(s) the invoice(s) are you paid for a project?
26. If there are problems with an invoice, how are they generally resolved?

Overall program

27. Other than reporting on individual projects, what other reporting is required by the program?
28. Is that amount of reporting sufficient? Have the reporting concerns been resolved?
29. Have there been any changes to program design since implementation began?
    a. If yes, what are the reasons for these changes?
30. Did CSG develop the dash board they planned to?
31. Do you foresee any changes that will occur in program design over the next year?

a. If yes, what are the changes and why?

32. Overall, do you feel the program is and/or will be useful for participants?

33. Do you feel that the program will be successful over the next two years?

Thank you for your time! Can we call you again in a year to ask you some additional questions about the program?

Appendix D. Ameren Multifamily Site Visit Manual

Preparation for Site Visits

The purpose of site visits is to perform spot checks for quality control on the implementation process. There will not be any penalties to the building owner/management for any reason.

Site Visit Notification to Building Owner/Manager

Either during the scheduling call or at least 2 days before the site visit discuss the following items with the building owner/manager:

- Purpose of the visit, required by Ameren Illinois Utilities for evaluating the overall program
- Date, time, and expected duration (1 ½ - 2 hours) of the visit
- They will receive a $50 VISA gift card as a thank you for their time involved in the visit
- The building owner/manager needs to accompany the technician on the visit
- They will need to get tenant permission in advance to enter any of the units during the visit
- Ask how many units are in the complex and let them know the technician will need to visit a random sample of the units that will be chosen by the technician at the time of the visit.

Data Collection Sheet Preparation

Each site scheduled for verification will have its own verification form. This sheet has fields which should be filled out prior to the visit. After the call, look up the sampling pattern in Table 1 below. As an example, if the owner says there are a total of 20 units on site, then you will attempt to visit every 4th unit, skipping those where the tenant refuses. Ideally, 6 or more units will be inspected at each complex where possible.

Table 1. Sampling Pattern

Number of Total Units in Complex	Number of Units to Visit per Complex	Visit Every _____ Unit
1-6	All	All
7-12	Minimum of 6 units	2nd
13-18	Minimum of 6 units	3rd
19-24	Minimum of 6 units	4th
25-30	Minimum of 6 units	5th
31-36	Minimum of 6 units	6th
For any complexes having more than 36 units	Minimum of 6 units	The number of units divided by 6 (EG if you have 60 units divide 60 by 6 and visit every 10th unit.)

Fill out the following fields, marked with an asterisk (*), in the verification form from information in the program database or notes from speaking to the building manager/owner:

- site ID
- building address
- building manager name and phone number
- number of units in the complex
- skip pattern

Also, look up the building in the database to see if there are common area measures installed. If there are common area measures present, indicate the quantity expected in the corresponding column on the verification form.

Site Visit Etiquette

- Dress appropriately for the inspection. Specifically, wear close-toed shoes, the Ameren logo polo shirt and casual office slacks (no shorts or skirts).
- Do not make or receive cell phone calls while on site unless necessary.
- Be on time for all site visit appointments. If you will be more than 15 minutes late for an appointment, call the building manager and confirm that you may still perform the verification.
- Try to not inconvenience the tenants in the apartment.
- Wipe your feet before entering the apartment.
- Answer all participant and building manager questions.

What to Bring

Bring the following to each site visit:

- Data collection sheet (bring at least 3 blank verification forms)
- Gift card signature sheet
- Clipboard and pen
- This manual

Measure Verification

The following sections describe how the on-site data collection sheet will be filled out during the visit. Please write your name (field staff) and the date of the site visit when you first arrive at the property.

Upon Arrival

Greet the building owner/manager and remind him or her that this verification is required by Ameren Illinois Utilities for purposes of evaluating the overall program. There are no penalties for any reason. Explain that you will need to visit the common areas (if measures were installed there) and a minimum of 6 units (where possible) according to the skip pattern determined in section 1.2. Ask the manager/owner if the property is all electric or also receives gas service and record in the appropriate field on the form.