# Chapter 7- Appendix A
## Ameren Missouri Program Templates

This Appendix introduces the programs and general delivery strategies that Ameren Missouri proposes to include in its Cycle 2 energy efficiency and demand response portfolio.[1] Ameren Missouri refers to these general strategies as "templates." The templates outline the overarching elements which the Company will commit to by filing this Plan: namely the energy savings goals and the budgets to achieve them. The specific program delivery details within the templates, however, are proposed as a directionally valid guideline with the understanding that they will shift and evolve over time.

It is critically important that the internal structure and allocation of resources within the programs remain flexible in order to adapt to changes in program performance, technologies, market/customer acceptance, evaluations, and codes and standards. Examples of adjustments that would be anticipated in light of the above factors are:

- Addition or removal of specific measures
- Adjustment of specific incentive amounts
- Alteration of marketing strategies
- Alteration of delivery/implementation strategies

As such, the strategies outlined in the program templates below will act as proposed general guidelines to set a framework that the implementation teams will fill in, adjust, and optimize through the ongoing application of their operational experience. Each program template contains a more detailed discussion of these concerns in a section entitled "Program Response to Evolving Markets."

The program templates also include proposed strategies for evaluation, measurement, and verification, but adjustments recommended by the independent evaluation contractors will be accepted, subject to the review and approval of Ameren Missouri.[2]

It should be noted that the values displayed in the template tables are aggregated measure categories, or a combination of similar end-use measures. For individual measure savings, costs, lifetime, etc., please see Electronic Work Papers "Measure Screen Data 11-18-2010.xlsx".

[1] 4 CSR 240-22.050(6)(D), 4 CSR 240-22.070(9)(B)
[2] 4 CSR 240-22.050(9)

## Residential Portfolio of Programs

The Residential Energy Efficiency portfolio of programs offers a wide range of energy management opportunities for the home. Ameren Missouri is determined to deliver a diverse selection of cost-effective energy efficiency options to residential customers and has designed the portfolio accordingly. Utilizing knowledge gained from the previous implementation period as well as focusing on national best practices, Ameren Missouri has designed a portfolio that will allow the Company multiple entry points into the home and allow the programs to expand the trade ally network to further transform the market. Furthermore, the programs will be designed to allow for new technologies and implementation practices to be incorporated into the design as markets mature and technologies evolve. The following section describes each residential program, the energy savings targets, budgets, and high level plans for marketing and implementation.

| PROGRAM | Residential Lighting |
|---|---|
| Objective | Increase sales and awareness of Energy Star qualified lighting products |
| Target Market | The target market will be national retailers including but not limited to Home Depot, Lowe's, and Sam's Club, and Costco. This target market will continue to leverage existing program partners (retailers and hardware stores) but also attempt to expand to include more local retailers and hardware stores as the program matures past the first 3 year implementation period. Ameren Missouri ("Company") will also offer an online store to service customers who do not have a retailer near their location. |
| Program Duration | January 2012 – December 2014 |
| Program Description | The program will be run through a Contractor and their subcontractors with significant experience in rebate processing and working with national retail outlets. The contractor will offer incentives to the manufacturing and retail partners to increase sales of qualified lighting. Through these upstream and midstream incentives, the end-user receives a discount on the price of highly efficient, Energy Star or better, qualified lighting products. There will be an emphasis on training the retail outlet sales staff to discuss the benefits of efficient lighting as well as increased point of purchase marketing materials to increase consumer awareness. |

**Eligible Measures & Incentive Strategy**

The program's incentives will be targeted at the mid-stream and up-stream program partners. Mark-downs on qualified products will allow end-use customers to purchase efficient lighting products at a reduced cost while reducing the administrative burden associated with buy-down and POP rebates to the customer. On various promotional events, an instant coupon option may be offered, delivering instant rebates at the point of sale to the customer.

The measure table below contains various measure categories that are comprised of multiple measures. Example: "CFL Bulb Specialty" is a combination of multiple measures including High Wattage CFL, CFL Reflector, and CFL Specialty Bulbs. Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

| Lighting | | | | | |
|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
| 13 w CFL | $ 1 | 46 | 0 | 9 | $ 3 |
| 18 w CFL | $ 1 | 56 | 0 | 9 | $ 3 |
| 23 w CFL | $ 0 | 51 | 0 | 9 | $ 1 |
| CFL bulbs specialty | $ 3 | 67 | 0 | 9 | $ 13 |
| HID Lamps - Exterior | $ 29 | 388 | - | 11 | $ 100 |
| Lighting Controls | $ 19 | 217 | 0 | 10 | $ 61 |
| CFL Fixture | $ 15 | 124 | 0 | 12 | $ 48 |

| | |
|---|---|
| **Implementation Strategy** | The Company will hire a Contractor and subcontractors to implement this program. The Prime contractor will provide the necessary services to effectively implement the program and obtain the energy savings goals outlined in the Plan while adhering to the budgetary constraints identified by the Company. Key implementation aspects include:<br>• Develop marketing material leveraging the Company's brand image, including coupons, POP marketing materials, and other materials to be used to support the sales staff.<br>• The contractor or their subs will have a call center to monitor program activity and assist with any customer discrepancies or questions that may arise. The call center should have knowledgeable staff that can assist and direct customers to the appropriate channels to alleviate customer concerns.<br>• A subcontractor will develop rebate processing software (or leverage system utilized in Cycle 1) to collect, process, and catalog the coupons and rebates and markdowns at the midstream and upstream level.<br>• A tracking system database will be developed to collect and monitor sales data from the field. The tracking system should also monitor rebates processed, segmented by retail partner, geographical locations, and sales volume. The database will have components to track field work as well, identifying stores visited, marketing materials left at store, and retailer feedback among other items. All data should be transparent and the Company will have access to this tracking system at its discretion.<br>• A subcontractor will develop reports to display the program's progress in relation to meeting budgets and savings goals on a regular basis. There will be other reporting which will identify operational details on progress with field representatives. Quarterly and annual reporting summarizing program milestones and achievements will be provided to the Company for review and to inform program redesign.<br>• The contractor will hire, train, and develop field representatives to educate and monitor retail outlet partners. These field representatives will be responsible for delivering marketing materials, training the retailers' sales staff, and reporting their findings.<br>• Potential to offer instant rebate coupon program depending on level of sales and budget availability. If it is needed or desired by the Company (in coordination with recommendations from the contractor) that a coupon program will help meet the required savings goals, provisions will be made to deliver this program. Coupons will be made available for customers to receive instant dollars off their purchase at the point of sale.<br>Additionally, an online store may be available to those customers who either cannot find a local retailer in their area or are more prone to purchase products online. |

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | The primary marketing efforts will be separated into customer awareness and also sales staff education. Recruitment of retail partners and further upstream manufacturing partners will be critical to the success of this program. Identifying the benefits of providing more efficient lighting products to customers as well as outlining the corresponding incentives will help to build the retail trade ally network. Various marketing materials will be delivered to the participating retail stores to inform end-use customers about efficient lighting. These materials include but are not limited to:<br>• POP Materials (hang tags, stickers, etc.)<br>• Lighting clinics and events at retailers<br>• Co-op advertising<br>• Coupons<br>• Print, radio, television commercials<br>• Web placement<br>• Billboards<br>The second component of the marketing will consist of training and educating the sales staff on effectively promoting and endorsing Energy Star or other high efficiency lighting products. Field representatives will deliver marketing materials to staff, train and educate the sales staff surrounding the Energy Star brand and its benefits, and provide a point of contact for retail partners to ask questions and receive any further clarification as needed. One item each retailer will receive is a retailer training manual. This manual will outline various sales techniques, identify benefits of Energy Star and other high efficiency lighting products, and inform the staff on the program procedures and inner workings. This manual will serve as the cornerstone in retailer training. |

**EM&V Requirements**

Ameren Missouri will engage an EM&V contractor(s) to determine the following:

**Impact Questions**

1. What were the Program's gross energy and demand impacts?
2. What were the Program's net energy and demand impacts?
3. Did the Program meet its savings targets within its budget? If not, why not?
4. What have been the market effects associated with Program activities?

**Process Questions**

1. Has implementation remained on track and met goals?
2. Has the Program been implemented in a manner consistent with Program design?
3. How effective have been the program implementation, design and processes, and marketing efforts?
4. What were program staff experiences and satisfaction levels with the Program?

**Analytical Methods**

Impact evaluations for upstream rebate programs are inherently difficult given a lack of participant contact information. The impact evaluation should have multiple components including: market effects, total sales, leakage, spillover, net-to-gross ratios and deemed savings estimates.

Data sources should include:

| Action | Sample Size | Details |
|---|---|---|
| Program Document Review | - | Used to inform the process evaluations and understand Program logistics. |
| Retailer Interviews | | Used to inform process evaluations and inform NTG ratios. |
| Stakeholder Interviews | | Used to inform the process evaluations and understand Program logistics. |
| Tracking Database | | Provides Program sale for each measure. |
| Baseline Survey | | Provides a baseline of measure saturations. |
| Site Visits | | Measure locations, saturation, hours of use |

## Estimated Participation

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| 13 w CFL | 660,368 | 443,599 | 292,704 | **1,396,671** |
| 18 w CFL | 31,447 | 21,124 | 13,939 | **66,510** |
| 23 w CFL | 94,339 | 63,372 | 41,816 | **199,526** |
| CFL bulbs specialty | 47,170 | 31,686 | 20,910 | **99,766** |
| HID Lamps - Exterior | 19,332 | 16,299 | 12,899 | **48,530** |
| Lighting Controls | 286 | 300 | 276 | **862** |
| CFL Fixture | 38,023 | 25,543 | 16,855 | **80,421** |

## Estimated Budget

| Estimated Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $2,014,717 | $1,462,543 | $840,610 | **$4,317,870** |
| Admin | $1,762,865 | $1,232,731 | $686,265 | **$3,681,861** |
| **Total** | **$3,777,582** | **$2,695,274** | **$1,526,875** | **$7,999,731** |

## Savings Targets

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 55,422,117 | 38,148,397 | 21,415,823 | **114,986,337** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 44,337,694 | 30,518,718 | 17,132,658 | **91,989,070** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Lighting | **1.99** |

| PROGRAM | Residential HVAC |
|---|---|
| Objective | Obtain energy and demand savings through improvement in the operating performance of existing residential cooling units including central AC units and heat pumps. |
| Target Market | Residential customers with central AC units or heat pumps. |
| Program Duration | January 2012 – December 2014 |
| Program Description | This program covers virtually every aspect of air conditioners and heat pumps including commissioning and retro-commissioning, rated unit efficiency, actual unit efficiency, duct system efficiency, retrofit and replacement upgrades.<br><br>Second, it provides new marketing concepts that, when successful, can be used for other programs in the Company's service area. Unlike the typical "shot-gun" approach, the marketing plan will target the best opportunities for participation. The Company will review the possibility of utilizing a more targeted marketing approach potentially containing multiple data sets including billing, census, and county/municipality data.<br><br>The Residential HVAC program improves the efficiency of new and existing central air conditioning systems, including heat pumps by replacing legacy and cooling systems within the home. The baseline efficiency conditions for new and replacement cooling and heating systems are applicable federal equipment standards and local building codes. Air conditioning systems are typically oversized relative to the cooling load and are usually not operating at manufacturer's specifications at time of installation. The baseline conditions for existing air conditioning systems usually include improper refrigerant charge and airflow across the coils and leaky ducts. Also, in many cases, ducts are undersized. |

**Eligible Measures & Incentive Strategy**

The measure table below contains various measure categories that are comprised of multiple measures. Example:"Duct Sealing" is blend of various sealing efficiencies (15%, 30%, etc.). Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

**HVAC**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| ASHP | $ 124 | 772 | 0.76 | 12 | $ 406 |
| DFHP | $ 78 | 637 | 0.74 | 12 | $ 254 |
| Duct Insulation | $ 70 | 321 | 0.07 | 20 | $ 220 |
| Duct location | $ 265 | 789 | 0.20 | 20 | $ 1,650 |
| Duct sealing | $ 23 | 351 | 0.09 | 18 | $ 73 |
| ECM Blower | $ 153 | 902 | 0.22 | 15 | $ 480 |
| AC | $ 140 | 508 | 0.45 | 12 | $ 438 |
| Air Sealing | $ 70 | 648 | 0.12 | 13 | $ 264 |
| HVAC Tune Up | $ 41 | 169 | 0.20 | 10 | $ 130 |
| PTAC/PTHP | $ 52 | 290 | 0.17 | 15 | $ 162 |
| Setback Thermostat | $ 23 | 657 | (0.02) | 9 | $ 73 |
| Ground Source Heat Pump | $ 816 | 11,936 | 0.71 | 15 | $ 8,400 |
| Refrigerant Charge Adjustment | $ 61 | 188 | 0.23 | 10 | $ 190 |
| Geothermal DeSuperheater | $ 27 | 1,540 | 0.17 | 10 | $ 239 |

**Implementation Strategy**

The Company will hire a Contractor to implement this program. The contractor will provide the necessary services to effectively implement the program and obtain the energy savings goals outlined in the Plan while adhering to the budgetary constraints identified by the Company. Key implementation aspects include:

- Targeted marketing approach for contractor recruitment and training. Contractor will develop a consistent and robust educational component to deliver an effective program. Training will commence once contractors enter into the participation agreement.
- Specific areas of training include measure testing protocols for the required test equipment, calibration requirements, procedures for various conditions, and acceptable tolerances. For equipment, the protocols will specify sizing requirements, efficiency standards, and other elements such as a matching indoor and outdoor coil requirement for new air conditioning equipment.
- Once contractors are trained, they can utilize the techniques and incentives provided by the Company to improve sales of highly efficient HVAC equipment and effectively diagnose and improve existing system inefficiencies. Ameren Missouri will provide incentives at the mid-stream (contractor) level to encourage sales of energy efficient products and for properly installed HVAC energy saving upgrades.

The program will employ the implementation contractor's preferred protocols to verify in real time for each job technicians' performance in refrigerant charge and airflow optimization, quality installs, and duct sealing. This Tune-up process could look something like the bullets below:

1. Testing immediately informs the technician if the unit qualifies for early replacement based on the rated EER or operating EER of the properly adjusted system. *This step provides the technician with the information they need to initiate the sale of a new high efficiency unit immediately, while they are still at the jobsite.*
2. By the end of the following week from the date of service, the customer is mailed a package containing:
   a. A document certifying the results of the testing performed on their system – *this reinforces the credibility of the contractor by providing 3rd party verification of their work and recommendations*
   b. Educational literature on the benefits of high efficiency air conditioners and heat pumps – *this reinforces the contractor's sales pitch to upgrade low efficiency systems, and improves customer awareness of the value of high efficiency systems*

| | |
|---|---|
| **Implementation Strategy Cont'd.** | a. Educational literature on the benefits of proper maintenance practices – *this increases customer awareness of the impacts of maintenance on the performance of their system and increases the likelihood that they will demand proper maintenance in the future*<br>c. Customer satisfaction survey – *this encourages customer participation and feedback and provides documentation that the program is progressing as intended*<br>d. Replacement systems are commissioned using the same diagnostic testing. *This step verifies the rated efficiency of the new system, and that it is properly installed and operating. This closes the loop in documenting the energy savings delivered by the replacement.*<br><br>Once the replacement has been completed an informational package, similar to the one used in the tune-up process, will be mailed to the customer. This package will certify the results, provide educational literature describing efficiency maintenance and benefits, and seek the completion of a satisfaction survey. |
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |

| | |
|---|---|
| **Marketing Strategy** | Marketing to customers must help to overcome barriers to their participation, especially a) lack of awareness, understanding, or trust of the new measures, b) lack of awareness and trust as to whom in the market can provide the new measures, and c) higher first costs. Program messaging will be designed to address the lack of awareness regarding the optimal performance of HVAC equipment and the benefits of high efficiency new equipment. The following methods will be employed to maximize customer attention, receptivity, and action.<br>• If deemed feasible and within the budget, the Contractor will analyze utility customer usage data, weather data, and demographic data to target the 10-15% of Ameren Missouri residential customers who are most likely to have inefficient cooling systems. Utilizing this data, the Contractor will send targeted direct mail to these customers identifying potential HVAC improvements tailored to their specific situation as defined by the data analysis.<br>• Contractor co-op advertising. The Contractor will work with HVAC contractors to target their existing customers and to prospect for new customers. The Contractor will work with the HVAC Contractor Community to identify existing customers that may qualify for the program as well as assistance on developing a new client base.<br>• Program collateral. The program will develop marketing collateral (and continue to leverage Cycle 1 material) to support all aspects of the program, especially materials for customers and contractors.<br>• Post-service materials will be used to inform the customer of system performance and provide opportunities for the company to cross-sell other efficiency programs. |

**EM&V Requirements**

The Contractor will have a comprehensive program monitoring databases and tracking systems to support this program. These systems are designed to manage the types of data and provide the reporting including:

- Contractor lists
- Customer information
- Equipment data
- Rated and operating efficiencies
- Pre and post-repair results
- Survey results
- Quality assurance inspection results

Data is reported to the Contractor call center by Contractor service technicians while they are at the jobsite. Service technicians receive immediate feedback, enabling them to make any needed adjustments before they leave the jobsite. Data are reported by telephone, entered into Contractor database by highly trained operators, processed through the Contractor quality assurance program, and immediately recorded in two databases. Nightly, the database should be scrutinized by quality control routines, and should be backed up offsite.

An independent third party evaluation contractor will review the program logic, databases, conduct billing analyses, and review calculation methodologies to evaluate the energy impacts of the program. Furthermore, stakeholder interviews, participant surveys, and program collateral review will assist in developing the process evaluation.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| ASHP | 63 | 69 | 148 | **280** |
| DFHP | 2 | 2 | 6 | **11** |
| Duct Insulation | 934 | 1,137 | 1,568 | **3,640** |
| Duct location | 372 | 451 | 623 | **1,447** |
| Duct sealing | 5,142 | 5,971 | 5,869 | **16,982** |
| ECM Blower | 3,653 | 4,557 | 6,426 | **14,636** |
| AC | 2,170 | 2,224 | 2,312 | **6,705** |
| Air Sealing | 2,248 | 2,722 | 3,745 | **8,715** |
| HVAC Tune Up | 5,310 | 5,992 | 7,597 | **18,899** |
| PTAC/PTHP | 418 | 617 | 986 | **2,022** |
| Setback Thermostat | 525 | 585 | 549 | **1,660** |
| Ground Source Heat Pump | 30 | 33 | 72 | **134** |
| Refrigerant Charge Upgrade | 4,426 | 4,995 | 6,332 | **15,753** |
| Geothermal DeSuperheater | 43 | 52 | 73 | **168** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $1,857,477 | $2,258,625 | $3,025,480 | **$7,141,581** |
| Admin | $1,254,408 | $1,476,942 | $1,924,990 | **$4,656,340** |
| **Total** | **$3,111,885** | **$3,735,567** | **$4,950,470** | **$11,797,922** |

**Savings Targets**

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 11,508,343 | 13,552,809 | 17,472,835 | **42,533,987** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 9,206,674 | 10,842,247 | 13,978,268 | **34,027,189** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES HVAC | **1.42** |

| PROGRAM | Residential Appliance Recycling |
|---|---|
| Objective | Promote the retirement and recycling of secondary, inefficient refrigerators, freezers and, if applicable, other qualifying appliances from households by offering a turn-in incentive and free pickup of working equipment, as well as information and education on the cost of keeping an inefficient unit in operation. |
| Target Market | Residential customers with working secondary refrigerators, freezers and other qualifying appliances manufactured in or before 2001. |
| Program Duration | January 2012 – December 2014 |
| Program Description | The Company will contract with an appliance recycling company to provide turnkey implementation services that include verification of customer eligibility, scheduling of pick-up appointments, appliance pickup, recycling and disposal activities, and incentive processing. Ameren Missouri will continue to leverage the infrastructure and market inertia created by the program in Cycle 1.<br>Turnkey program implementation through an appliance recycling contractor will simplify program delivery, reduce the Company's administrative costs, and ensure a streamlined participation process. The program is designed to minimize barriers to participation by offering incentives, convenient scheduling of appointments, and cost-free pickup of qualifying equipment. |
| Eligible Measures & Incentive Strategy | In addition to free pick-up of eligible equipment, the Program will provide turn-in incentives. As the Appliance Recycling Program continues to evolve and ongoing EM&V activities track program performance, the Company may revise incentive amounts, energy savings levels, and participation as more information on market trends presents itself. However, the following expectations and assumptions have been utilized for planning purposes, including the base rebate levels listed below. |

**Appliances**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| Refrigerator recycling | $ 35 | 1,260.0 | 0.2 | 6 | $ - |
| Freezer recycling | $ 35 | 1,247.0 | 0.2 | 5 | $ - |
| Room AC recycling | $ - | 113.0 | 0.1 | 8 | $ - |
| Dehumidifier recycling | $ - | 139.0 | 0.0 | 8 | $ - |

| | |
|---|---|
| **Implementation Strategy** | Key elements of the Appliance Recycling Program implementation strategy include:<br>• **Outsourcing implementation**: The Company will issue RFP to regional/national appliance recycling companies to provide comprehensive, turnkey implementation services from eligibility verification to proper disposal/recycling of turned-in refrigerators.<br>• **Customer education/recruitment**: The Contractor and Company will develop and implement the marketing strategy collaboratively. There will be a consumer marketing and education components emphasizing how much it costs to operate that old, secondary refrigerator, as well as the availability of program incentives and pick-up services. This marketing message will vary depending on seasonality and program performance towards meeting energy savings goals. |
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, the Company and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. The Company will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, the Company will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | The program will employ strong consumer education and marketing components emphasizing the savings associated with retiring old, inefficient refrigerators, freezers and other qualifying appliances and the importance of ensuring proper disposal/recycling. The program retains the ability to leverage ENERGY STAR promotional resources such as the national Refrigerator Retirement Promotion (July – September) and the Refrigerator Retirement Savings Calculator. Call Center staff will be trained and provided with program collateral.<br>Anticipated marketing materials will include:<br>• Web content<br>• Bill stuffers and other direct mail<br>• Limited mass market advertising around special promotions<br>• TV, radio<br>• Garage Sale ads, promotional handouts to LIHEAP agencies, realtors, and appliance retailers<br>• Door-hangers, truck wraps<br>• Billboards<br>In addition, the Company may consider working with retailers to determine if there are opportunities to re-cycle used appliances that are targeted to be sold in the secondary markets. |

| | |
|---|---|
| **EM&V Requirements** | To effectively evaluate the Appliance Recycling program, the Evaluation Contractor will utilize at least the following techniques to inform their findings. Both process and impact evaluations will be conducted to assess energy savings as well as program design/implementation effectiveness and also to provide critical recommendations for future program years.<br><br>**Impact Evaluation**<br>The impact evaluation will be conducted through participant surveys and secondary data analysis to identify savings per unit. The surveys will perform multiple functions including:<br>• Verification of unit removal<br>• Customer decision making process and appliance operating characteristics<br>• Customer Demographics help determine energy use, housing characteristics, and other variables in determining per unit energy consumption.<br>Secondary data analysis will provide insight on key operating characteristics to determine per unit energy savings. Databases of manufacturer refrigerator estimates as well as other evaluation reports conducted for other Investor Owned Utilities will be analyzed to inform this Program's evaluation efforts. Data found in these secondary sources include:<br>• Appliance Age<br>• Appliance Size<br>• Appliance Configuration<br>These values will assist in determining per unit energy consumption as well as identify a suitable degradation factor to be used for analysis.<br><br>**Process Evaluation**<br>The process evaluation will focus on program operations and identify strengths, weaknesses, and areas for improvement in regard to program design and implementation. Multiple approaches will be utilized for process evaluation including participant surveys, stakeholder interviews, and secondary research.<br>• Participant surveys – monitor customer satisfaction and demographic data informing the Company how the Program is received in the field and identifying areas for improvement.<br>• Stakeholder interviews – all staff involved in the delivery of the program (contractors, Ameren Missouri Staff, subcontractors, call centers, etc.) will be investigated for potential interviews. These interviews will provide valuable information on program design, delivery, management, effectiveness, and communication within the implementation team.<br>• Secondary Research – best practice evaluation techniques from across the nation will be reviewed and integrated into this Program's evaluation methodology as necessary to improve the quality of the final report. |

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Refrigerator recycling | 6,373 | 3,503 | 3,072 | **12,948** |
| Freezer recycling | 3,235 | 1,778 | 1,559 | **6,572** |
| Room AC recycling | 952 | 523 | 460 | **1,935** |
| Dehumidifier recycling | 1,332 | 977 | 1,335 | **3,644** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $356,758 | $201,987 | $182,420 | **$741,165** |
| Admin | $1,294,451 | $748,098 | $706,250 | **$2,748,799** |
| **Total** | **$1,651,208** | **$950,085** | **$888,670** | **$3,489,964** |

**Savings Targets**

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 13,031,949 | 7,525,682 | 7,626,522 | **28,184,152** |
| **Net-to-Gross** | 0.54 | 0.54 | 0.54 | **0.54** |
| **Net kWH** | 7,037,252 | 4,063,868 | 4,118,322 | **15,219,442** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Appliance Recycling | **1.31** |

| PROGRAM | Residential Low Income |
|---|---|
| Objective | The objective of this program is to deliver long-term energy savings and bill reductions to low-income customers. This will be achieved through education, a variety of cost-effective measures, and other building and shell improvements. |
| Target Market | The program will target low-income residential customers within the Ameren Missouri ("Company") service territory. For this program, low-income is defined as below 135% of Federal poverty level. This definition is subject to change depending on funding and federal requirements. The target market is multifamily building owners, managers, operators, and developers of properties with dwelling units (DUs) of three (3) or more in buildings participating in one or more of the federally subsidized housing programs: HUD, USDA and Public Housing. The low income tenants are the direct beneficiaries of the direct installed measures. As the program matures, there may be a possibility of broadening the target market to include single family, low income homes. |
| Program Duration | January 2012 – December 2014 |

| | |
|---|---|
| **Program Description** | The Program will directly install measures in program-eligible rental dwelling units (DU) in multifamily residential buildings, with potential to increase program coverage to single family detached homes at a later date in Cycle 2. Measures shall be installed by a subcontractor in compliance with Program requirements.<br>The Program will conduct group, and when necessary, individual tenant educational meetings with income-qualified multifamily building residents to prepare them for the use of the installed measures. Educational meetings will explain the sponsorship and purpose of the Program and provide opportunities for tenants to learn about energy efficiency and offer feedback to Ameren Missouri and the Program.<br>Properties participating in the Low Income Program may have the option to implement Standard lighting measures through the Multifamily Program in common areas (as applicable) and to meet any code requirements for occupancy.<br>Incentives under this program will only be provided toward income qualified dwelling units. Measures installed through the Low Income program are not eligible for Incentives through any of the Company's other Energy Efficiency programs. The non-incented Measures installed through the Low Income Program remain eligible for other Energy Efficiency program incentives.<br><br>The Program would work with participating subcontractors for the direct installation of various measures including, but not limited to:<br>• Attic and wall insulation<br>• CFL installations<br>• Programmable thermostat installation<br>• Custom measure for a case-by-case basis<br>• Air Sealing<br>• Energy Star Room AC<br>• Others |

**Eligible Measures & Incentive Strategy**

The eligible measures and corresponding savings and incentive levels reflect best estimates at the time of this plan's creation and are subject to change as the market dictates. The incentives reflect the full incremental cost as all of the measures will be directly installed in the customer's premise.

The measure table below contains various measure categories that are comprised of multiple measures. Example:"Air Sealing" is a blend of various sealing levels (15%, 30% etc.). Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

**Low Income**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| Air Sealing | $ 264 | 648 | 0.12 | 13 | $ 264 |
| Duct Sealing | $ 475 | 351 | 0.09 | 18 | $ 475 |
| Duct Insulation | $ 528 | 321 | 0.07 | 20 | $ 528 |
| Setback Thermostat | $ 73 | 657 | (0.02) | 9 | $ 73 |
| PTAC/PTHP | $ 1,185 | 290 | 0.17 | 15 | $ 1,185 |
| CFL | $ 8 | 47 | 0.00 | 9 | $ 8 |
| CFL bulbs specialty | $ 18 | 67 | 0.01 | 9 | $ 18 |
| CFL Fixtures | $ 45 | 78 | 0.01 | 12 | $ 45 |
| Low Flow Faucet Aerators | $ 14 | 136 | 0.02 | 12 | $ 14 |
| Low Flow Showerheads | $ 42 | 424 | 0.05 | 12 | $ 42 |
| Water Heater Accessories | $ 74 | 168 | 0.02 | 5 | $ 74 |
| Energy Star Room AC | $ 325 | 101 | 0.09 | 12 | $ 325 |
| Smart Strip | $ 40 | 184 | 0.01 | 5 | $ 40 |
| Ceiling Fan | $ 275 | 63 | 0.03 | 15 | $ 275 |

| | |
|---|---|
| **Implementation Strategy** | The Program will provide incentives for the direct install of Program-specified measures in Program-eligible Dwelling Units (DU's) in multifamily residential buildings (with the possibility to include single family low income homes later in Cycle 2). Program-listed energy efficiency measures ("EEM's") shall be furnished and installed, in compliance with Program requirements, by program qualified contractors. The Program will be run through a contractor or Company management staff. The program participants are comprised of owners, operators, managers, developers and re-developers of program-eligible multifamily residential properties.<br><br>An initial outreach effort will be the primary component of this program. The Contractor will identify income qualified buildings/units, develop marketing materials suitable for this market segment, solicit building owners and managers directly, and finally meet with decision makers, in person, to identify opportunities.<br><br>Once a property has signed up to participate in the program, the Contractor will initiate a communication campaign to inform and educate building tenants about the energy efficiency improvements being implemented in their units. A pre-install letter will be mailed or given to each tenant to explain the program and to provide a schedule for the group tenant education meeting and measures installation as well as Company contact information.<br><br>An on-site group tenant education meeting will be scheduled to educate tenants on the measures and additional steps tenants can take to manage their energy usage. Yard signs and banners will be placed at the primary entrances to the building and door hangers will be placed on each resident's door.<br><br>The day of the installation, subcontractors will be deployed to install the approved measures and to conduct one-on-one tenant education for the residents not present at the group tenant education meeting. Three (3) business days following installation, each resident will be mailed or given a post-installation letter which includes a Thermostat Quick Reference Guide and Energy Savings Tips Guide.<br><br>The Company will monitor installations. The first set of projects performed by each contractor would be site-verified, with random site verifications thereafter to ensure that installations are being performed properly and that equipment is being installed as reported. All projects undertaken directly by the customer would be site-verified prior to payment.<br><br>Subcontractors responsible for the direct installation of measures will be reimbursed after the Company has received an invoice for work completed in a given month. |

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | The Program will use marketing communications appropriate to the distinct needs of the Low Income market.<br>**Program Objectives:**<br>• Create awareness and understanding of the Program, its benefits, its sponsor, among occupants of participating properties.<br>• Provide general background material on and specific suggestions and learning opportunities to tenants for improving their home's energy efficiency.<br>Marketing materials will be developed for both property owners and property tenants. This will include:<br>For building owners, managers and Program Partners:<br>• Sales "kit" folder to include:<br>○ Program overview brochure.<br>○ Program application.<br>○ Sell sheet/flyer showing program marketing collateral available including banner, door hangtag, yard sign and window cling.<br>○ Pre- and post-install tenant letter samples<br>○ Building specific flyers depicting statistics and cost savings when applicable.<br>○ Online program overview on Ameren Missouri website.<br>For building tenants/residents:<br>• On-site signage and pre-install flyer templates announcing/advertising the energy efficient upgrades being installed.<br>• Doorknob hangtags with fill-in-the-blank areas for building owners to write in day of install and items being installed.<br>• Online program overview on Ameren Missouri. |

**EM&V Requirements**

In order to properly evaluate the Low Income program, the Company will hire an independent third party evaluation contractor. This program has many moving parts, which can make it difficult to decipher energy savings. The evaluation contractor will use a variety of methodologies to assess the energy impacts and program processes. For impact evaluation, the contractor could use billing analysis, phone surveys, and on-site audits (or other methodology developed at a later date) to measure energy savings. Process evaluations will likely include components such as program partner surveys, stakeholder interviews, and program document review. There are numerous variations of Low Income programs and associated evaluation techniques, the Company will collaborate with the evaluation contractor to develop the most appropriate methodology for Ameren Missouri's program.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| Air Sealing | 340 | 378 | 484 | **1,202** |
| Duct Sealing | 389 | 415 | 379 | **1,182** |
| Duct Insulation | 132 | 147 | 189 | **468** |
| Setback Thermostat | 106 | 108 | 95 | **309** |
| PTAC/PTHP | 92 | 125 | 185 | **402** |
| CFL | 31,446 | 20,503 | 12,709 | **64,657** |
| CFL bulbs specialty | 1,887 | 1,230 | 763 | **3,880** |
| CFL Fixtures | 699 | 456 | 282 | **1,437** |
| Low Flow Faucet Aerators | 2,343 | 2,545 | 2,363 | **7,251** |
| Low Flow Showerheads | 750 | 817 | 761 | **2,328** |
| Water Heater Accessories | 1,623 | 1,654 | 1,437 | **4,714** |
| Energy Star Room AC | 8 | 3 | 2 | **13** |
| Smart Strip | 65 | 69 | 84 | **218** |
| Ceiling Fan | 306 | 340 | 431 | **1,077** |

**Estimated Budget**

**Estimated Electric Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $1,375,950 | $1,479,203 | $1,572,762 | **$4,427,915** |
| Admin | $1,408,049 | $1,482,032 | $1,548,006 | **$4,438,087** |
| **Total** | **$2,783,999** | **$2,961,234** | **$3,120,769** | **$8,866,002** |

**Savings Targets**

**kWh Savings**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| **Gross kWH** | 3,308,665 | 2,812,648 | 2,215,133 | **8,336,445** |
| **Net-to-Gross** | 1 | 1 | 1 | **1** |
| **Net kWH** | 3,308,665 | 2,812,648 | 2,215,133 | **8,336,445** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Low Income | **0.65** |

## Business Portfolio Programs

Like the Residential portfolio of programs, the Ameren Missouri Business portfolio of programs offers a complementary set of energy management options to commercial and industrial customers. Historically, a large portion of applications have fallen under the Standard incentive program (dominated by lighting). Ameren Missouri has found to-date, that the Custom incentive program has received most of the activity. This is primarily due to Custom incentive levels more accurately reflecting savings levels when compared to Standard Program incentives. As the programs continue to mature and the economic conditions begin to recover, larger and more complex projects may require even more emphasis on more customized programs.

Ameren Missouri will continue to proactively offer customized efficiency options to its commercial customers. As the Business implementation team refines its processes, a stronger focus may emerge on smaller commercial markets, which historically have been a difficult segment to penetrate. Continual marketing, education, and training will be integral in developing a contractor network capable of delivering these customized solutions. The program templates below summarize each program's energy savings targets, budgets, and implementation plans.

| PROGRAM | Business Standard Incentive Program |
|---|---|
| **Objective** | The Business Standard Program is designed to promote the installation of energy efficient technologies including lighting, motors, HVAC, and refrigeration in nonresidential properties. Measures included within this program are common in multiple marketplaces and have deemed savings values associated with their energy performance. This program encourages customer participation through a simple and streamlined program process. |
| **Target Market** | Nonresidential customers including commercial, industrial, and targeted institutional. |
| **Program Duration** | January 2012 – December 2014 |
| **Program Description** | The Business Standard Program will incentivize customers to purchase energy efficient products. Measures included within this program will have deemed savings values and fixed incentive levels associated with them (although these incentive values may change as program budgets and performances alter throughout the year). Applications are filled out and delivered to Ameren Missouri via contractors, customers, or perhaps through the Company's website. Various measures may require a simple calculation to identify measure savings, but the measure level incentives will remain fixed regardless of individual project characteristics. Trade allies including contractors, retailers, and distributors will be the main sales force promoting the program and educating customers.<br>There is also an information and education component to the program specifically directed to electric motors. While Ameren Missouri believes a majority of the motor projects will be incentivized through the Custom program, a portion of motor incentives will be delivered through the Standard program. These motor incentives will focus on an early replacement strategy for customers opting to re-wind their inefficient motors. |

**Eligible Measures & Incentive Strategy**

The measure table below contains various measure categories that are comprised of multiple measure types. Example: "Motors" is a blend of various horsepower ranges from 1 – 250 HP. Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

**Business Standard**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| AC | $ 8,557 | 19,154 | 21.9 | 15 | $ 26,887 |
| Heat Pumps | $ 9,924 | 32,549 | 21.0 | 15 | $ 31,180 |
| Energy Management | $ 1,285 | 120,340 | (12.0) | 9 | $ 6,057 |
| High Performance T8 | $ 16 | 130 | 0.0 | 12 | $ 49 |
| Outdoor Lighting | $ 107 | 694 | 0.1 | 12 | $ 338 |
| Misc Lighting | $ 24 | 134 | 0.0 | 12 | $ 75 |
| Water Heaters | $ 9,548 | 184,058 | 36.5 | 15 | $ 30,000 |
| Commercial Refrigeration | $ 410 | 3,677 | 0.7 | 12 | $ 1,288 |
| Cooking Equipment | $ 2,499 | 11,721 | 2.6 | 12 | $ 7,853 |
| Misc Water Heating | $ 10 | 5,374 | 0.1 | 8 | $ 48 |
| Misc | $ 92 | 1,265 | 0.2 | 5 | $ 321 |
| Motors | $ 220 | 371 | 0.1 | 15 | $ 207 |
| Pumps | $ 441 | 1,267 | 0.3 | 15 | $ 416 |
| Chillers | $ 24,585 | 223,580 | 79.0 | 20 | $ 77,247 |
| VFDs | $ 2,521 | 8,341 | 2.8 | 8 | $ 1,779 |

**Implementation Strategy**

Primary Implementer responsibilities include final program design, measure lists, implementation plan development, and expanding and enhancing the existing trade ally network of program partners. The main distribution channel will be the trade allies which include contractors, distributors, vendors, and local economic development associations where applicable. In order for these allies to effectively promote and communicate the benefits of the program, proper training and marketing materials will be provided by the Implementation team.

As customers submit applications for incentives, Program staff may review and pre-approve projects depending on project size. An individual project implementation timeline will be utilized to encourage prompt installation and maintain accurate tracking of program savings goals and relative budgets.

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its Implementers will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |

**Marketing Strategy**

Marketing efforts will focus on trade allies and program partners. Key pillars of the marketing strategy for the C&I Standard Program include:

- **Education:** Implementer will play an important role in training and educating the trade ally sales staff. The Implementer will assist trade allies in identification of measures qualifying for prescriptive incentives; identify the different application options, and how to effectively sell the program to customers.
- **Marketing Materials:** Materials will be provided to the customers to further enhance program awareness and increase market penetration.
- **Direct Mail:** This marketing vehicle will require a targeted approach, identifying potential efficient installs based of business operating characteristics and building types.
- **Associations:** A unique opportunity exists in trade organizations and various associations. Businesses rely on these associations to represent that industry's best interests in lobbying, growth, and identification of business opportunities. Ameren Missouri will coordinate with specific associations to highlight program offerings suitable for their respective industry.
- **Highlight successfully completed projects**. Ameren Missouri will selectively choose projects to display the process and benefits of the Standard Incentive. This type of marketing will spur the customer's competitors to improve building performance and increase business process efficiency. This marketing strategy also allows the selected customer promotional and marketing opportunities.
- **Trade Allies** – Ameren Missouri will continue to utilize the growing trade ally network as salespersons for the program. Proper training will be given to these program partners to ensure that any business development activities are conducted to achieve program goals.
- **Inter-program Marketing**. It is common for customers to apply for other program incentives only to find the equipment does not satisfy that incentive program's requirements. This is an opportunity to send the project to other incentive programs for further engineering analysis and review. Aiding customers in identifying the appropriate Business programs is important in maintaining high levels of customer satisfaction as well as increasing probability of meeting energy savings goals.
- **Market Segmentation**. To more effectively penetrate the Ameren Missouri markets, a targeted marketing approach will be used. Separating the program's marketing campaign to focus on specific customer types (hospitality/lodging, grocery/convenience store, etc.) will increase customer interest and drive installations.

**Marketing Strategy Cont'd**

In regards to motors, overall, Year 1 will be establishing a program infrastructure, overcoming inertia, enlisting the participation of motor dealers, analyzing the marketplace and capturing some kWh savings via and End User rebate.

**EM&V Requirements**

This program will be evaluated by a third party evaluation contractor. This contractor will quantify the energy and demand savings impacts of the program as well as conduct a thorough process evaluation reviewing program design, implementation, and marketing practices. Key components of the evaluation methodology include:

- Developing an evaluation plan for the implementation period for each individual program in the business portfolio.
- Identify verification protocols and procedures for Implementers via process evaluation.
- Review the implementation tracking system and program theory.
- Conduct evaluation and verification.
- Calculate program impacts and report findings on an annual basis.

Measurement and verification of measure installation will be taken for a statistically valid sample of projects. In order to accurately measure the energy impacts of the program, the evaluation contractor will utilize best-practice evaluation methods including but not limited to:

- End-use monitoring
- Building simulation models
- On-site engineering analysis
- Billing analysis

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| AC | 3 | 4 | 5 | **11** |
| Heat Pumps | 5 | 6 | 6 | **17** |
| Energy Management | 25 | 30 | 38 | **94** |
| High Performance T8 | 22,933 | 29,318 | 40,418 | **92,669** |
| Outdoor Lighting | 20 | 33 | 98 | **151** |
| Misc Lighting | 2,458 | 3,140 | 4,330 | **9,929** |
| Water Heaters | 4 | 4 | 4 | **12** |
| Commercial Refrigeration | 51 | 60 | 78 | **189** |
| Cooking Equipment | 22 | 29 | 38 | **89** |
| Misc Water Heating | 82 | 98 | 125 | **305** |
| Misc | 350 | 406 | 486 | **1,242** |
| Motors | 595 | 708 | 823 | **2,125** |
| Pumps | 10 | 13 | 14 | **36** |
| Chillers | 4 | 5 | 5 | **14** |
| VFDs | 27 | 33 | 34 | **95** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $1,078,127 | $1,338,390 | $1,681,489 | **$4,098,006** |
| Admin | $1,825,484 | $2,010,425 | $2,254,609 | **$6,090,518** |
| **Total** | **$2,903,611** | **$3,348,815** | **$3,936,099** | **$10,188,525** |

**Savings Targets**

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 12,245,125 | 14,359,902 | 17,181,710 | **43,786,737** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 9,796,100 | 11,487,922 | 13,745,368 | **35,029,390** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Standard | **2.10** |

| PROGRAM | Business Custom Incentive Program |
|---|---|
| **Objective** | The Commercial Custom program provides energy efficiency expertise, services, and financial incentives to encourage C&I customers to install energy efficient equipment that lies outside standard lighting, HVAC, motors, refrigeration, and others. Some Custom projects are complex and require detailed savings calculations to arrive at the appropriate custom incentive level. |
| **Target Market** | Nonresidential customers including commercial, industrial, and targeted institutional. |
| **Program Duration** | January 2012 – December 2014 |
| **Program Description** | The Custom Program applies to products in lighting, HVAC, refrigeration, motors, and others that do not fall into the Standard Program Incentive program. These projects normally are complex and unique requiring separate incentive applications and calculations of estimated energy savings.<br><br>A unique component of the Custom program will be a re-evaluation on the motors and drives market, specifically focusing on early replacement incentives for customers that re-wind inefficient motors. The long-term energy savings associated with the installation of NEMA Premium motors for the Ameren Missouri service territory is approximately 500 GWH. Fundamental barriers to achieving this potential include: first cost vs. life cycle costing; energy efficiency taking secondary status to operating conditions, lack of corporate direction, the general massive scale of the potential market. At its core, the motor information and education component of the Business Custom program is market transformation designed to create pull through marketing for NEMA Premium motors. It is behavior based to create long-term persistence. It is technology based to create short-term opportunities for the retrofitting of existing inefficient motors through innovative marketing programs including a "bounty" program possibly in conjunction with federal funding. It is also designed to create long-term opportunities to replace inefficient motors with NEMA Premium motors through attrition. |

**Eligible Measures & Incentive Strategy**

Financial incentives will be provided to offset the higher costs associated with installation of new, cost-effective equipment or building system upgrades falling outside the scope of standard measures. Incentive levels will be calculated based off energy savings estimates for each project. Incentives will be subject to modification in order to balance the program's financial requirements and savings targets and meet market demand.

Project funding may be capped at a predetermined level per program year, per facility. Incentive levels will vary between different technologies as needed to adhere to budgetary limits and achieve energy savings goals.

Alternatively, for large projects yielding large kWh in savings, a competitive project incentive may be offered. This program area will have no payback criteria and may have a predetermined incentive cap (not to exceed 50% of project cost for example). The application process will mimic the process flow listed above, with the major difference being the incentive amount and payback criteria.

The measures categories below represent a blend of typical Custom Program measures. Example: "LED" is a blend of LED downlights and LED refrigerated case lighting. Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. Through Ameren Missouri's review of national best practice and market experience, it has been determined that 2 years is an adequate payback period to drive customer adoption, reflected in incentive levels below. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

| Business Custom | | | | | |
|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
| AC | $ 1,829 | 19,154 | 22 | 15 | $ 26,887 |
| CHW | $ 4,647 | 48,668 | 4 | 5 | $ 251 |
| Optimization/Compressed Air | $ 72 | 750 | 0 | 15 | $ 99 |
| Heat Pumps | $ 638 | 6,678 | 4 | 15 | $ 4,768 |
| Energy Management | $ 1,341 | 14,041 | 1 | 9 | $ 5,500 |
| Optimized Process Cooling | $ 1,559 | 16,325 | 2 | 15 | $ 1,568 |
| Optimized Process Heating | $ 673 | 7,053 | 1 | 15 | $ 760 |
| VFDs | $ 456 | 4,778 | 1 | 15 | $ 670 |
| Commercial Refrigeration | $ 94 | 982 | 0 | 15 | $ 232 |
| Vending Machine Upgrades | $ 58 | 606 | 0 | 6 | $ 136 |
| Lighting Controls/Sensors | $ 371 | 4,996 | 1 | 10 | $ 1,319 |
| CFL Fixture | $ 25 | 342 | 0 | 12 | $ 45 |
| CFLs | $ 25 | 331 | 0 | 2 | $ 9 |
| LED | $ 11 | 185 | 0 | 15 | $ 77 |
| Pumps | $ 1,434 | 1,267 | 0 | 15 | $ 416 |
| Motors | $ 38 | 399 | 0 | 15 | $ 219 |
| Barrel Wraps Inj Mold and Extruders | $ 5 | 50 | 0 | 5 | $ 2 |
| Building Shell Improvements | $ 1,657 | 17,354 | 3 | 20 | $ 7,822 |
| Ventilation | $ 249 | 2,608 | 1 | 15 | $ 556 |

| | |
|---|---|
| **Implementation Strategy** | The Implementer will be responsible for engineering review of program application and related quality assurance. The installation of efficiency measures is the responsibility of the customer. The customer will submit an application outlining their potential efficiency upgrades. The Implementer will perform a thorough desk review of project cost and estimated energy savings to pre-approve the installation. Qualifying potential projects follow a common screening criteria process flow:<br>• **Facility eligibility** – The facility must meet the Program requirements (appropriate rate class, located in Ameren Missouri service territory, equipment must be new and installed at business rate class location).<br>• **Project eligibility** – project must be installing new, energy efficient equipment or incorporating energy efficient designs, measures installed cannot qualify for standard incentives, and Ameren Missouri must approve any product purchase or installation before the customer can receive an incentive.<br>• **Application submittal** – customer will submit the project application to Ameren Missouri for analytic review and pre-installation approval.<br>• **Customer implements project** – the customer has primary responsibility to install the pre-approved measures and improvements.<br>• **Post installation documents** – customer will provide data including invoices, receipts, and any engineering analysis (if the project was altered from original application).<br><br>For projects exceeding a specified cost or energy savings threshold, on site visits will be required to verify energy savings estimates, baseline data, and proper measure installation. Company's approval will be required for any incentive application exceeding a preset limit defined by Ameren Missouri.<br>For the motor component of the program, it is imperative that Ameren Missouri work with the motor dealer / distributor in program design. Not only are they potential marketing and educational allies, but they hold the keys to the end user that Ameren Missouri is trying to influence. Secondly, they are business people first. They do not necessarily care about energy efficiency, even as a value added resource to their customer, unless there is something in it for them. Both sides of a successful program (dealer – end user) must benefit in a business model sense. If it is too hard to sell a more efficient motor due to lack of end user understanding, economics, etc. the dealer will sell whatever they have on hand. |

| | |
|---|---|
| **Implementation Strategy Cont'd.** | Educating the end user is the most effective way to increase sales and stocking habits of dealers and help to ensure persistence.<br><br>Components of the implementation plan include:<br>• End User Rebates<br>• Dealer Stocking Programs<br>• Upstream Dealer Incentives<br>• Educational/Evaluative Programs<br>• Motor Bounty/Retrofit/Crusher Credit Scenario |
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Due to the relatively complex nature of the Custom Program, it will be important for Ameren Missouri to alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |

**Marketing Strategy**

Marketing efforts will focus on trade allies and program partners. Key pillars of the marketing strategy for the C&I Custom Program include:

- **Education:** Implementer will play an important role in training and educating the trade ally sales staff. The Implementer will assist trade allies in identification of measures qualifying for prescriptive incentives; identify the different application options, and how to effectively sell the program to customers.
- **Marketing Materials:** Materials will be provided to the customers to further enhance program awareness and increase market penetration.
- **Direct Mail:** This marketing vehicle will require a targeted approach, identifying potential efficient installs based of business operating characteristics and building types.
- **Associations:** A unique opportunity exists in trade organizations and various associations. Businesses rely on these associations to represent that industry's best interests in lobbying, growth, and identification of business opportunities. Ameren Missouri will coordinate with specific associations to highlight program offerings suitable for their respective industry.
- **Highlight successfully completed projects**. Ameren Missouri will selectively choose projects to display the process and benefits of the Custom program. This type of marketing will spur the customer's competitors to improve building performance and increase business process efficiency. This marketing strategy also allows the selected customer promotional and marketing opportunities.
- **Trade Allies** – Ameren Missouri will continue to utilize the growing trade ally network as salespersons for the program. Proper training will be given to these program partners to ensure that any business development activities are conducted to achieve program goals.
- **Inter-program Marketing**. It is common for customers to apply for other program incentives only to find the equipment does not satisfy that incentive program's requirements. This is an opportunity to send the project to other incentive programs for further engineering analysis and review. Aiding customers in identifying the appropriate Business programs is important in maintaining high levels of customer satisfaction as well as increasing probability of meeting energy savings goals
- **Market Segmentation**. To more effectively penetrate the Ameren Missouri markets, a targeted marketing approach will be used. Separating the program's marketing campaign to focus on specific customer types (hospitality/lodging, grocery/convenience store, etc.) will increase customer interest and drive installations.

| | |
|---|---|
| **Marketing Strategy Cont'd.** | Field Representatives are crucial to the motors marketing strategy because they can focus on relationship building, training and education (MotorMaster, selling with a Rebate, etc.), POP replenishment, assistance with application processing and (when desired) ride-alongs to end users. These ride-alongs allow the Rep to educate and seek other motor / VFD opportunities. Additionally, it helps train the dealer how to promote energy efficiency measures and life cycle costing concepts.<br>The marketing strategy for Year 2-3 has the following elements:<br>• Move away from financial incentives and rebates.<br>• Use the program to uncover all the various energy saving opportunities available at C&I locations. This includes not only motors and drives, but lighting, HVAC, steam, pumping and compressed air.<br>• As Ameren Missouri continuously refines its portfolio of measures, it might find solar, wind, CHP, DG and load shedding opportunities are worth pursuing based upon what the motor program uncovers during generalized energy profile audits.<br>• Work with U.S. DOE on heavy industry sectors where co- funding may exist.<br>• Develop sustainability and persistence within the C&I sector through Best Practices and behavior changes in purchasing and specification. |

**EM&V Requirements**

A third party evaluation contractor will be responsible for evaluation and verification of the Business Custom Program. Prime responsibilities of the evaluation contractor include measuring energy impact savings and conducting a process review analyzing program marketing, implementation, and program design. Components of the evaluation methodology include but are not limited to:

- End-use Monitoring
- On-site Engineering Analysis
- Engineering review
- Staff interviews
- Tracking system review
- Qualitative and Quantitative participant research and analysis

As many custom projects involve larger C&I customers, appropriately assigning Net-to-Gross impacts requires diligent analysis of the stated intensions and review preferences of customers. The evaluator will develop an acceptable methodology to effectively evaluate the program. Methodologies include:

- Developing an evaluation plan for the implementation period for each individual program in the business portfolio.
- Identify verification protocols and procedures for Implementers via process evaluation.
- Review the implementation tracking system and program theory.
- Conduct evaluation and verification.
- Calculate program impacts and report findings on an annual basis.

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| AC | 11 | 9 | 12 | **32** |
| CHW | 6 | 3 | 3 | **12** |
| Optimization/Compressed Air | 1,410 | 1,164 | 1,602 | **4,176** |
| Heat Pumps | 3 | 3 | 3 | **9** |
| Energy Management | 98 | 81 | 82 | **260** |
| Optimized Process Cooling | 28 | 19 | 20 | **66** |
| Optimized Process Heating | 131 | 102 | 99 | **332** |
| VFDs | 1,499 | 1,237 | 1,674 | **4,411** |
| Commercial Refrigeration | 1,121 | 828 | 772 | **2,721** |
| Vending Machine Upgrades | 26 | 22 | 27 | **74** |
| Lighting Controls/Sensors | 2,026 | 1,632 | 1,952 | **5,610** |
| CFLs | 7,686 | 4,216 | 1,059 | **12,960** |
| LED | 2,832 | 2,477 | 4,119 | **9,428** |
| Pumps | 22 | 18 | 21 | **61** |
| Motors | 989 | 779 | 917 | **2,685** |
| Barrel Wraps Inj Mold and Extruders | 25 | 20 | 27 | **72** |
| Building Shell Improvements | 36 | 27 | 26 | **89** |
| Ventilation | 34 | 27 | 27 | **88** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $2,389,776 | $1,839,806 | $2,063,912 | **$6,293,494** |
| Admin | $3,177,200 | $2,416,464 | $2,683,487 | **$8,277,151** |
| **Total** | **$5,566,976** | **$4,256,269** | **$4,747,399** | **$14,570,644** |

**Savings Targets**

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 29,522,272 | 22,122,436 | 23,984,325 | **75,629,034** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 23,617,818 | 17,697,949 | 19,187,460 | **60,503,227** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Custom | **2.06** |

| PROGRAM | Business Retro-commissioning |
|---|---|
| Objective | This program will deliver energy and demand savings by helping building owners benchmark existing building performance levels, identify building operating system performance optimization improvements, and where applicable, provide financial incentives to assist with the implementation of the recommended efficiency improvements. |
| Target Market | Nonresidential customers including commercial, industrial, and targeted institutional. |
| Program Duration | January 2012 – December 2014 |
| Program Description | Ameren Missouri will continue to leverage the existing infrastructure of qualified contractors and marketing partners that has delivered measureable energy savings in the Cycle 1. The program will seek to identify efficiency opportunities associated with existing mechanical, electrical and thermal systems in nonresidential buildings by providing options for retrofitting equipment that is inefficient and outdated. This program also assists occupants in improving their operation and maintenance practices via compressed air and process system upgrades. |
| Eligible Measures & Incentive Strategy | An incentive will be given to the customer to buy-down the cost of the survey/benchmarking exercise. Incentives will cover a predetermined portion of the survey cost, depending on cost-effectiveness and savings potential per project.<br><br>The following deemed savings estimates, effective useful lives, and incremental costs reflect common measures found in retro-commissioning projects. The incentive levels are estimated and will be verified by the Contractor prior to program launch and are subject to change based on Implementer experience and expertise. These incentives are meant to reflect a 2 year payback, which from program experience and national best practice is in a range suitable to drive business customers to participate in the program. |

**Retro-Commissioning**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| CHW | $ 53 | 48,668 | 3.70 | 5 | $ 251 |
| EMS | $ 36,487 | 253,919 | 25.40 | 15 | $ 98,265 |
| Refrigerant charging correction | $ 8,809 | 22,680 | 26.07 | 10 | $ 2,442 |
| Retrocommissioning, Lighting | $ 23,253 | 5,311 | 0.94 | 5 | $ 761 |
| Optimizing Process Cooling | $ 1,730 | 16,325 | 2.24 | 15 | $ 1,568 |
| Optimizing Process Heating | $ 3,967 | 7,053 | 0.97 | 15 | $ 760 |
| Compressed Air Optimization - Leak Audit, New Compressors, Improved Controls | $ 8 | 200 | 0.03 | 10 | $ 16 |

| | |
|---|---|
| **Implementation Strategy** | The Implementer will manage the implementation of the program, rebate fulfillment, oversee survey and implementation of efficiency measures, and provide engineering review for each project. Project qualification process will follow the following methodology.<br>• Retro-commissioning agents identify potential candidates for the Program.<br>• A study is conducted to assess the viability of the project and determine energy savings and cost estimates. After engineering analysis and verification of estimated savings has been completed, the Implementer will work with building owners and trade allies to conduct an engineering audit based on industry best practice to benchmark the building's energy profile.<br>• Following the facility audit, efficiency upgrades will be recommended by the Implementer and completed by the customer. Potential efficiency improvements include but are not limited to: compressed air leak identification, system controls calibration, energy management systems, and variable speed drive tune-ups.<br>• After the implementation stage, an ex post verification will take place to ensure proper installation and adherence to stipulated implementation guidelines. Once the project is completed and approved by the Implementer, an incentive check will be delivered to the customer. |
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |

| | |
|---|---|
| **Marketing Strategy** | Ameren Missouri and its implementation contractors will continue to follow a multi-faceted approach for marketing the Business Retro-commissioning Program. Main marketing strategies include:<br>• **Trade Ally Marketing** – provide the contractors conducting surveys and implementing measures with necessary marketing materials, education, and awareness training allowing them to effectively and accurately promote the program to customers.<br>• **Customer Marketing** – with assistance from the Key Account Executive department of Ameren Missouri, the Retro-commissioning program will target nonresidential customers that will benefit from building systems upgrades.<br>• **Web Marketing** – leverage the existing Company website to educate consumers on how the program works as well as listing qualified trade allies to complete the work.<br>• **Print Ads** – strategically place advertisements for the program in industry publications, local newspapers, press releases, and other periodicals that will reach a large audience of potential customers. |
| **EM&V Requirements** | A third party evaluation contractor will be responsible for evaluation and verification of the Business Retro-commissioning Program. Prime responsibilities of the evaluation contractor include measuring energy impact savings and conducting a process review analyzing program marketing, implementation, and program design. Components of the evaluation methodology include but are not limited to:<br>• End-use Monitoring<br>• On-site Engineering Analysis<br>• Engineering review<br>• Staff interviews<br>• Tracking system review<br>• Qualitative and Quantitative participant research and analysis<br>As many custom projects involve larger C&I customers, appropriately assigning Net-to-Gross impacts requires diligent analysis of the stated intensions and review preferences of customers. The evaluator will develop an acceptable methodology to effectively evaluate the program. Methodologies include:<br>• Developing an evaluation plan for the implementation period for each individual program in the business portfolio.<br>• Identify verification protocols and procedures for Implementers via process evaluation.<br>• Review the implementation tracking system and program theory.<br>• Conduct evaluation and verification.<br>• Calculate program impacts and report findings on an annual basis. |

## Estimated Participation

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| CHW | 1 | 0 | 0 | **1** |
| Optimized Process Cooling | 1 | 1 | 1 | **3** |
| Optimized Process Heating | 1 | 1 | 1 | **2** |
| Retrocommissioning Lighting | 13 | 11 | 11 | **35** |
| EMS | 81 | 72 | 69 | **222** |
| Compressed Air Optimization | 4 | 3 | 2 | **9** |
| Refrigerant Charge Correction | 18 | 15 | 12 | **45** |

## Estimated Budget

**Estimated Electric Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $55,787 | $47,897 | $43,993 | **$147,677** |
| Admin | $53,481 | $43,865 | $38,736 | **$136,082** |
| **Total** | **$109,268** | **$91,762** | **$82,729** | **$283,759** |

## Savings Targets

**kWh Savings**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| **Gross kWH** | 1,253,836 | 1,033,746 | 947,426 | **3,235,008** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 1,003,069 | 826,997 | 757,941 | **2,588,007** |

## Cost-effectiveness

**Program Cost Effectiveness**

| Measure | TRC |
|---|---|
| BUS Retro-commissioning | **2.55** |

| PROGRAM | Business New Construction |
|---|---|
| Objective | The primary goal of this program is to capture energy savings available in new building construction, major renovations, or tenant build-outs in non residential facilities. Due to the latest economic fluctuations and the limited access to capital, many companies have delayed new construction or major build-outs. To help encourage customer activity, Ameren Missouri will offer multiple paths for the customer to utilize in their new construction projects. |
| Target Market | Nonresidential customers constructing a new building, major tenant build-out, or renovation in the planning and design phase. Customers can be in commercial, industrial, or targeted institutional market segments. |
| Program Duration | January 2012 – December 2014 |

| | |
|---|---|
| **Program Description** | The New Construction program is meant to encourage energy efficient building practices within the Ameren Missouri service territory. There are several market barriers that must be overcome including high first cost, lack of building construction activity, and market adoption of these relatively complex and innovative building design practices. Through increased education and training as well as financial incentives, Ameren Missouri will attempt to influence the market and promote efficient building design and construction.<br><br>It is vital that Ameren Missouri work closely with the design/construction community to identify adoption barriers, clarify needs of the industry, and propose solutions to overcome these barriers. Targeted marketing and training will be utilized to further move the market and transform building practices.<br><br>It is important to offer the building community multiple options for their specific projects. This program will be separated into two main components: new building construction and major build-outs/renovations to existing facilities. The Program will accommodate any phase of construction where incremental energy efficiency improvements can be captured.<br>• **Whole Building New Construction** – companies looking to construct new buildings in Ameren Missouri's territory will be able to qualify for this track of incentives. The customer can receive varying levels of design assistance based on LEED or Advanced Buildings "Core Performance" standards (depending on scale and scope of project). It is important for the Contractor to work with the customer during the design phase where a majority of critical decisions affecting the building's energy consumption are made.<br>• **Major Renovations/Build-outs** – if customers are looking to significantly alter the building they currently occupy, the Renovation/Build-out track offers incentives to encourage energy efficient building practices. Rather than complicated and expensive design as with whole building approach, system renovations/build-outs will supply prescriptive incentive levels for measures exceeding ASHRAE 90.1-2007 standards. This will streamline the process for the Implementation contractor and provide multiple options for customers looking to expand their operations. An added benefit of this prescriptive approach is the applicability to multiple market segments (incentives can apply to healthcare, offices, industrial, etc.).<br><br>Baseline will be determined by the existing building code or if no building code exists the baseline will be ASHRAE90.1 2004. |

**Eligible Measures & Incentive Strategy**

The measure table below contains various measure categories that are comprised of multiple measures. Example: "Building Shell Measures" is a blend of multiple shell measures including radiant barrier, window replacement, and wall insulation. Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

**New Construction**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| AC | $ 11,410 | 19,154 | 21.94 | 15 | $ 26,887 |
| Water Heaters | $ 10,814 | 184,058 | 36.54 | 15 | $ 30,000 |
| Water Cooled Chillers | $ 32,781 | 468,294 | 78.99 | 79 | $ 20 |
| Lowflow Showerheads | $ 3 | 174 | 0.02 | 9 | $ 12 |
| Lighting Controls | $ 25 | 5,089 | 1.30 | 10 | $ 1,342 |
| Super T8's and T5 lighting | $ 22 | 130 | 0.03 | 12 | $ 52 |
| Building Shell Measures | $ 3,788 | 23,434 | 4.68 | 23 | $ 10,457 |
| Energy Management | $ 2,569 | 15,476 | 1.53 | 9 | $ 6,055 |
| Heat Pumps | $ 10,120 | 27,434 | 16.42 | 15 | $ 23,847 |
| Commercial Refrigeration | $ 288 | 1,984 | 0.23 | 12 | $ 681 |
| CFL | $ 2 | 331 | 0.08 | 2 | $ 9 |
| CFL Fixture | $ 10 | 342 | 0.08 | 12 | $ 45 |
| LEDs | $ 136 | 177 | 0.04 | 15 | $ 70 |
| Thermostat | $ 2 | 120,340 | (11.99) | 9 | $ 6,057 |

**Implementation Strategy**

The Implementation team will be responsible for program implementation, project management, design and technical assistance, and program recruiting. Key implementation steps include:

- Recruiting new construction projects within the developer/design markets through targeted marketing strategies and focused training sessions.
- Application assistance and review. Applications will be reviewed by the Implementer as they are received. The Implementer will assist customers in the application process to ensure the application is properly filled out and to foster a positive image of the Program within the design industry.
- Once the application is approved, the customer can begin construction. After completion, the Implementer will verify proper measure installation and ensure the project meets the necessary project design specifications and building code stipulations.
- Incentive fulfillment. Once the project is reviewed and proper QA/QC has been completed, the customer receives incentive payment.

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |

**Marketing Strategy**

Marketing efforts will focus on trade allies and program partners. Key pillars of the marketing strategy for the C&I New Construction Program include:

- **Education:** Implementer will play an important role in training and educating the trade ally sales staff. The Implementer will assist trade allies in identification of measures qualifying for prescriptive incentives; identify the different application options, and how to effectively sell the program to customers.
- **Marketing Materials:** Materials will be provided to the customers to further enhance program awareness and increase market penetration.
- **Direct Mail:** This marketing vehicle will require a targeted approach, identifying potential efficient installs based of business operating characteristics and building types.
- **Associations:** A unique opportunity exists in trade organizations and various associations. Businesses rely on these associations to represent that industry's best interests in lobbying, growth, and identification of business opportunities. Ameren Missouri will coordinate with specific associations to highlight program offerings suitable for their respective industry.
- **Highlight successfully completed projects**. Ameren Missouri will selectively choose projects to display the process and benefits of the Custom program. This type of marketing will spur the customer's competitors to improve building performance and increase business process efficiency. This marketing strategy also allows the selected customer promotional and marketing opportunities.
- **Trade Allies** – Ameren Missouri will continue to utilize the growing trade ally network as salespersons for the program. Proper training will be given to these program partners to ensure that any business development activities are conducted to achieve program goals.
- **Inter-program Marketing**. It is common for customers to apply for other program incentives only to find the equipment does not satisfy that incentive program's requirements. This is an opportunity to send the project to other incentive programs for further engineering analysis and review. Aiding customers in identifying the appropriate Business programs is important in maintaining high levels of customer satisfaction as well as increasing probability of meeting energy savings goals
- **Market Segmentation**. To more effectively penetrate the Ameren Missouri markets, a targeted marketing approach will be used. Separating the program's marketing campaign to focus on specific customer types (hospitality/lodging, grocery/convenience store, etc.) will increase customer interest and drive installations.

**EM&V Requirements**

A third party evaluation contractor will be responsible for evaluation and verification of the Business New Construction Program. Prime responsibilities of the evaluation contractor include measuring energy impact savings and conducting a process review analyzing program marketing, implementation, and program design. Components of the evaluation methodology include but are not limited to:

- End-use Monitoring
- On-site Engineering Analysis
- Engineering review
- Staff interviews
- Tracking system review
- Qualitative and Quantitative participant research and analysis

As many custom projects involve larger C&I customers, appropriately assigning Net-to-Gross impacts requires diligent analysis of the stated intensions and review preferences of customers. The evaluator will develop an acceptable methodology to effectively evaluate the program. Methodologies include:

- Developing an evaluation plan for the implementation period for each individual program in the business portfolio.
- Identify verification protocols and procedures for Implementers via process evaluation.
- Review the implementation tracking system and program theory.
- Conduct evaluation and verification.
- Calculate program impacts and report findings on an annual basis.

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| AC | 0 | 1 | 1 | **2** |
| Water Heaters | 0 | 0 | 0 | **1** |
| Water Cooled Chillers | 0 | 0 | 1 | **1** |
| Lowflow Showerheads | 0 | 0 | 0 | **1** |
| Lighting Controls | 1,462 | 1,897 | 2,725 | **6,084** |
| Super T8's and T5 lighting | 2,743 | 3,535 | 4,997 | **11,275** |
| Building Shell Measures | 1 | 2 | 2 | **5** |
| Energy Management | 3 | 4 | 4 | **11** |
| Heat Pumps | 0 | 0 | 1 | **1** |
| Commercial Refrigeration | 4 | 4 | 5 | **13** |
| CFL | 304 | 255 | 66 | **626** |
| CFL Fixture | 76 | 64 | 17 | **156** |
| LEDs | 136 | 183 | 315 | **633** |
| Thermostat | 2 | 3 | 4 | **9** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $148,835 | $188,499 | $248,114 | **$585,448** |
| Admin | $277,974 | $350,034 | $458,546 | **$1,086,554** |
| **Total** | **$426,810** | **$538,532** | **$706,660** | **$1,672,002** |

**Savings Targets**

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 1,483,250 | 1,765,773 | 2,132,520 | **5,381,542** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 1,186,600 | 1,412,618 | 1,706,016 | **4,305,234** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS New Construction | **1.70** |

| PROGRAM | Business Multifamily |
|---|---|
| Objective | Deliver cost-effective conservation services to the multifamily housing market, with a focus on common area improvements. Secondary focus will be on affordable housing properties. |
| Target Market | Owners, managers and developers of market rate multifamily housing (three or more units). Focus on management companies holding multiple properties. |
| Program Duration | January 2012 – December 2014 |
| Program Description | The program would provide installation of measures in tenant spaces and also provide significant incentives for replacement of standard efficiency common area lighting and incandescent and fluorescent exit signs with LED exit signs. More expensive or complex measures (windows, replacement of roof-top AC units) would be subject to an energy analysis to validate cost-effectiveness and set incentive levels. The incentives for these measures would be calculated in a fashion similar to the C&I Custom Incentive program, although the threshold payment period would be set at 1 year, recognizing that this is a market that is harder to reach than the C&I market. The program would include limited technical services such as walk-through audits to determine approximate measure of cost effectiveness. The Company will evaluate the possibility of integrating this program into the Business Standard or Business Custom Program. |

**Eligible Measures & Incentive Strategy**

Measures listed below are accompanied by estimated savings and cost values. The incentive levels were produced through a formulaic approach which would bring the payback for each measure down to two years. The measure table below contains various measure categories that are comprised of multiple measures. Example: "Vending Machine Upgrades" includes beverage and snack machine controls. Consequently, measure savings, costs, participation, measure mix, and incentive dollars reflected below are a blend of multiple measure data and may not be representative of the values used in the implementation of the program. More refined data will be provided at the time of the tariff filing after the measures have been vetted through the implementation team.

**Multifamily**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| AC | $ 8,557 | 19,154 | 21.94 | 15 | $ 26,887 |
| Heat Pumps | $ 10,481 | 29,302 | 21.54 | 15 | $ 32,931 |
| CFL | $ 2 | 331 | 0.08 | 2 | $ 9 |
| CFL Fixture | $ 10 | 342 | 0.08 | 12 | $ 45 |
| HP T8 | $ 17 | 136 | 0.03 | 12 | $ 53 |
| LED | $ 18 | 177 | 0.04 | 15 | $ 70 |
| Lighting Controls | $ 427 | 5,089 | 1.30 | 10 | $ 1,342 |
| Motors | $ 55 | 287 | 0.06 | 15 | $ 171 |
| Vending Machine Upgrades | $ 43 | 584 | 0.03 | 5 | $ 135 |
| Building Shell Improvements | $ 3,381 | 25,637 | 5.30 | 20 | $ 10,983 |
| LED Exit Signs | $ 4 | 201 | 0.02 | 15 | $ 25 |

| | |
|---|---|
| **Implementation Strategy** | This program will be implemented by a third party contractor. However, even within this third party structure there are two different implementation structures. The first uses the implementation contractor to recruit customers, perform technical services such as audits, arrange pricing and assist with arranging for installation contractors. An alternative approach that may be evaluated will utilize the contractor to recruit trade allies, negotiate pricing and qualify the contractors, and then allow them to market the program. Incentives would be paid directly to contractors based on proof of performance. Some experience shows that this second approach is more effective in driving actual savings. It does, however, require more vigilant QA/QC. The implementation steps outlined below assume a hybrid model that includes some level of direct outreach to customers.<br>○ Set final equipment eligibility and rebate levels, and develop contractor participation agreements. Most multifamily programs achieve most of their savings through common area lighting and in-unit CFL installations. Although the program should provide for broader measure eligibility, the incentive structure should be focused on generating activity with lighting replacement. Standard lighting technologies would be eligible for standard incentives.<br>○ Contractors sell the projects without direct involvement from the Program aside from the verification and incentive payment. Customers would be required to agree to provide access to their facilities for verification.<br>○ The Program would conduct direct outreach to owners and managers of multifamily properties through direct mailing. These customers could directly undertake efficiency improvements with facility staff or a contractor of their choosing. Rebate levels for common measures would be the same, but the program would also provide customized rebates for more complex cost-effective measures.<br>○ Monitor installations. The first set of projects performed by each contractor would be site-verified, with random site verifications thereafter to ensure that installations are being performed properly and that equipment is being installed as reported. At Ameren Missouri's discretion, projects undertaken directly by the customer would be site-verified prior to payment.<br>Pay incentives. This program would not use a reservation system. Upon completion of a project, the contractor would submit an incentive application, including Property manager acceptance of the completed project, and documentation of the types and location of installed equipment. Subject to the verification process outlined above, the incentives would be paid by the implementation contractor or Ameren. |

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | The marketing strategy has two-tracks; one aimed at lighting contractors and the other at property owners and managers. Marketing tactics would include direct mail and phone contact, participation in local meetings of multifamily property managers. The program would be advertised via the Company's web site. Marketing collateral would be limited to a basic program brochure. |
| **EM&V Requirements** | A third party evaluation contractor will be responsible for evaluation and verification of the Business Custom Program. Prime responsibilities of the evaluation contractor include measuring energy impact savings and conducting a process review analyzing program marketing, implementation, and program design. Components of the evaluation methodology include but are not limited to:<br>• End-use Monitoring<br>• On-site Engineering Analysis<br>• Engineering review<br>• Staff interviews<br>• Tracking system review<br>• Qualitative and Quantitative participant research and analysis<br>As many custom projects involve larger C&I customers, appropriately assigning Net-to-Gross impacts requires diligent analysis of the stated intensions and review preferences of customers. The evaluator will develop an acceptable methodology to effectively evaluate the program. Methodologies include:<br>• Developing an evaluation plan for the implementation period for each individual program in the business portfolio.<br>• Identify verification protocols and procedures for Implementers via process evaluation.<br>• Review the implementation tracking system and program theory.<br>• Conduct evaluation and verification.<br>• Calculate program impacts and report findings on an annual basis. |

## Estimated Participation

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| AC | 1 | 1 | 1 | **3** |
| Heat Pumps | 0 | 0 | 0 | **1** |
| CFL | 434 | 319 | 74 | **827** |
| CFL Fixture | 109 | 80 | 18 | **207** |
| HP T8 | 1,908 | 2,134 | 2,630 | **6,672** |
| LED | 194 | 228 | 350 | **772** |
| Lighting Controls | 93 | 101 | 111 | **305** |
| Motors | 79 | 84 | 91 | **254** |
| Vending Machine Upgrades | 1 | 1 | 1 | **4** |
| Building Shell Improvements | 1 | 2 | 1 | **4** |
| LED Exit Signs | 80 | 87 | 80 | **247** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $95,718 | $106,195 | $121,874 | **$323,786** |
| Admin | $73,288 | $80,172 | $90,934 | **$244,394** |
| **Total** | **$169,005** | **$186,367** | **$212,808** | **$568,180** |

## Savings Targets

| kWh Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross kWH** | 1,105,142 | 1,133,413 | 1,118,320 | **3,356,875** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net kWH** | 884,114 | 906,731 | 894,656 | **2,685,500** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Multifamily | **1.66** |

## Demand Response

Reducing system demand during peak load events is a strategy that requires unique planning and a variety of options. Ameren Missouri has identified four potential demand response programs that can assist the Company in not only managing system load, but also offers customers an opportunity to save on their electric bills. Two main approaches towards demand response have been considered, direct load control and peak time rebates. The section below summarizes each program and identifies the demand savings targets, budgets, and implementation plan associated with the programs. It should be noted that the implementation period for each demand response program falls outside this 3 year implementation plan's time horizon, therefore, budgets, participants, and savings have been removed from the program templates. The integration team holds responsibility for determining the appropriate time to market for these programs in conjunction with supply side requirements.

| PROGRAM | Residential Direct Load Control |
|---|---|
| Objective | This program is designed to acquire peak demand reduction through fully-automated Direct Load Control demand response systems for the residential sector |
| Target Market | All residential customers. |
| Program Duration | January 2012 – December 2014 |
| Program Description | Several technologies will be utilized to control various systems within the consumer household. Controllable switches will be placed on air conditioners, water heaters, or pool pumps allowing the Ameren Missouri to utilize the demand when needed. An alternative approach will utilize a programmable, controllable thermostat ("PTC") to garner the desired demand from residential customers.<br><br>The Company benefits through reduced peak power purchases and increased electric system reliability. Customers can benefit through reduced energy bills and an additional incentive. There will be up to 15 events per year the Company can call. Each event will last no more than 4 hours, totaling 60 hours of demand-calling capabilities throughout the program year. |
| Eligible Measures & Incentive Strategy | **Direct Load Control** |
| Implementation Strategy | This program could be implemented directly by the Company using installation contractors or could be contract with a program implementation contractor to manage all elements of implementation.<br>Direct Load Control events are usually triggered by periods of peak demand. These usually occur during the summer between 3pm and 7pm. Customers receive an automated phone call or email 24 hours prior to an event, notifying them that their thermostats will be subject to utility control.<br>During periods of peak demand, the Company would cycle the Central AC system, water heater, or pool pump for participating customers. Depending on the equipment selected, the Company could provide various cycling options and could allow the customer to override the smart thermostat.<br>For example, customers that chose to override the smart thermostat would receive a reduced or no incentive. The Company could also incorporate a web-based notification and tracking system for use by customers. |

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| RES Direct Load Control - AC switch | | - | 1.0 | 15 | $ 135 |
| RES Direct Load Control - water htr switch | | - | 1.0 | 15 | $ 135 |
| RES Direct Load Control - pool pump switch | | - | 2.6 | 15 | $ 135 |
| RES Direct Load Control - PCT | | - | 1.0 | 15 | $ 300 |

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | Targeted marketing campaigns will be directed towards targeted geographic regions of the service territory that have sufficient concentrations of customers with central air conditioning and complete paging coverage. The key steps are as follows:<br>• Customers will be targeted through direct mail solicitations in designated geographical regions of the service territory. The marketing solicitation will clearly explain the value proposition of the program to the customer as well as explain the value of demand response to the grid.<br>• HVAC Contractors that wish to install thermometers for the Demand Response Program will be recruited in the designated geographical areas in order to be trained for becoming installers for the program. These contractors will also promote the smart thermostat in the course of their daily HVAC related business dealings with potentially eligible customers. |
| **EM&V Requirements** | The key EM&V issue is the verification of load reduction, both in terms of the reduction per control point as well as the signal success rate which affects the average reduction across control points.<br>Components of the program evaluation are planned to include:<br>▪ Review of existing application and tracking forms, and recommending changes on a go-forward basis, if needed.<br>▪ Review load research and engineering studies and/or other supporting documentation in order to verify the consistency of the load reduction estimates with other available information.<br>▪ Review and comment on the on-site forms to be used by program implementers for verification that equipment is installed and operable.<br>▪ Review of on-site verification results.<br>The Company collects usage and billing data using CellNet's automatic meter reading (AMR) system. These same data can then used for evaluation purposes.<br>Process evaluation tends to be relatively less important for standard load management programs. However, two key process metrics to be tracked are the ratio of customers acquired to customers recruited, and customer churn rate, as both metrics can significantly affect the cost of the program. |

**Estimated Participation**

The demand response programs will be initiated after this Implementation Period. The tables below will be populated at a later date.

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| RES Direct Load Control - AC switch | 0 | 0 | 0 | 0 |
| RES Direct Load Control - water htr switch | 0 | 0 | 0 | 0 |
| RES Direct Load Control - pool pump switch | 0 | 0 | 0 | 0 |
| RES Direct Load Control - PCT | 0 | 0 | 0 | 0 |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $ - | $ - | $ - | $ - |
| Admin | $ - | $ - | $ - | $ - |
| **Total** | **$ -** | **$ -** | **$ -** | **$ -** |

**Savings Targets**

| kW Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MW** | 0.0 | 0.0 | 0.0 | **0** |
| **Net-to-Gross** | 1 | 1 | 1 | **1** |
| **Net MW** | 0.0 | 0.0 | 0.0 | **0** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES DLC | **1.12** |

| PROGRAM | C&I Direct Load Control |
|---|---|
| Objective | The program seeks to reduce customer demand through installation of command and control switches on commercial customers systems. |
| Target Market | The target market will consist of customers in all commercial and industrial rate classes, but targeting customers with over 150 kW of peak demand. |
| Program Duration | January 2012 – December 2014 |
| Program Description | The utility will solicit commercial and industrial customers to participate in the program. Controllable switches will be installed on either the HVAC, water heating, or other energy producing system allowing the utility to call the desired demand during the time of an event.<br>There will be a maximum of 15 events called during the program year. Each event will last up to 4 hours for a total of 60 hours per year, per customer premise, of dispatchable demand. |
| Eligible Measures & Incentive Strategy | **Direct Load Control** |

| Measure | Incentive per unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| Small C&I - 2M - DLC - AC switch | | - | 2 | 15 | $ 135 |
| Small C&I - 2M - DLC - water htr switch | | - | 2 | 15 | $ 135 |
| Small C&I - 2M - DLC - PCT | | - | 2 | 15 | $ 300 |

**Direct Load Control**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|
| Medium C&I 3M - no tech | | - | 18 | 1 | $ - |
| Medium C&I 3M - with tech | | - | 29 | 1 | $ - |
| Large C&I - 4M and 11M - no tech | | - | 163 | 1 | $ - |
| Large C&I -4M and 11M - with tech | | - | 302 | 1 | $ - |

**Implementation Strategy**

Ameren Missouri will seek to achieve demand savings through the following work scope.

- Identify potential customers who qualify and are willing to participate in the program.
- Provide further education and marketing material as needed to assist the customer in making an informed decision.
- Contract is signed with the customer outlining the demand savings goals, program protocols, and other related information.
- Technology is installed at the customer premise.
- After the switch is installed, the customer energy system is ready to be integrated into the program.

| | |
|---|---|
| **Program Response to Evolving Markets** | Due to the unpredictable nature of the market place, Ameren Missouri and its contractors will maintain flexibility within the program. Various market factors including new codes and standards, energy legislation, and consumer attitudinal shifts will affect the measure mix and program delivery strategy. Ameren Missouri will alter incentive levels and measure participation as necessary to ensure program success through achievement of energy savings goals. If, through changing market conditions, it is determined the program will no longer provide energy savings or drive value to the customer, Ameren Missouri will take the necessary steps to withdraw the program from the market and reallocate funds and energy savings into the other programs. |
| **Marketing Strategy** | Ameren Missouri will assemble a team of Key Account Executives and Customer Service Advisors to prioritize eligible customers based on mutually agreed upon qualification parameters. These customers will be contacted first by phone using scripts developed by Ameren Missouri to better understand the customer's interest and potential. Once a qualified candidate is identified, Ameren Missouri will meet with the appropriate facility staff to discuss program requirements and to conduct initial facility audits to identify specific demand response activities. |
| **EM&V Requirements** | The key EM&V issue is the verification of load reduction, both in terms of the reduction per control point as well as the signal success rate which affects the average reduction across control points.<br>Components of the program evaluation are planned to include:<br>▪ Review of existing application and tracking forms, and recommending changes on a go-forward basis, if needed.<br>▪ Review load research and engineering studies and/or other supporting documentation in order to verify the consistency of the load reduction estimates with other available information.<br>▪ Review and comment on the on-site forms to be used by program implementers for verification that equipment is installed and operable.<br>▪ Review of on-site verification results.<br>The Company collects usage and billing data using CellNet's automatic meter reading (AMR) system. These same data can then used for evaluation purposes.<br>Process evaluation tends to be relatively less important for standard load management programs. However, two key process metrics to be tracked are the ratio of customers acquired to customers recruited, and customer churn rate, as both metrics can significantly affect the cost of the program. |

**Estimated Participation**

The demand response programs will be initiated after this Implementation Period. The tables below will be populated at a later date.

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Medium C&I 3M - no tech | - | - | - | - |
| Medium C&I 3M - with tech | - | - | - | - |
| Large C&I - 4M and 11M - no tech | - | - | - | - |
| Large C&I -4M and 11M - with tech | - | - | - | - |

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Small C&I - 2M - DLC - AC switch | - | - | - | - |
| Small C&I - 2M - DLC - water htr switch | - | - | - | - |
| Small C&I - 2M - DLC - PCT | - | - | - | - |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $ - | $ - | $ - | $ - |
| Admin | $ - | $ - | $ - | $ - |
| **Total** | $ - | $ - | $ - | $ - |

**Savings Targets**

| kW Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MW** | 0.0 | 0.0 | 0.0 | **0** |
| **Net-to-Gro** | 1 | 1 | 1 | **1** |
| **Net MW** | 0.0 | 0.0 | 0.0 | **0** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS DLC 3M | **1.48** |

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS DLC 2M | **2.69** |

## Compliance References