
# Electric and Gas Energy Efficiency and Demand-Response Plan

Program Years:

June 1, 2011 – May 31, 2014

## Ameren Illinois Company

**(formerly the Ameren Illinois Utilities)**

January 20, 2011

# Table of Contents

# List of Figures



# List of Tables

# 1.0 Plan Summary

## 1.1 Introduction

Ameren Illinois' Energy Efficiency and Demand Response ("EEDR") Plan ("Plan 2") was originally filed in Docket No. 10-0568 on September 30, 2010 (and revised by way of Errata on October 21, 2010) and represented the second filing of an electric energy efficiency Plan to satisfy the requirements of Section 8-103 and the first filing of a gas energy efficiency Plan to satisfy the requirements of Section 8-104 of the Illinois Public Utilities Act ("Act"), 220 ILCS 5/8-103, 220 ILCS 5/8-104, by Ameren Illinois Company ("Ameren Illinois").[1]

The Illinois Commerce Commission ("Commission") entered a Final Order ("Order") in this proceeding conditionally approving Ameren Illinois' Petition for approval of Plan 2, subject to a compliance filing that incorporates and is consistent with the terms of the Order. Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 109. This Plan 2 incorporates the requirements set forth in the Order and represents Ameren Illinois' compliance filing for Docket No. 10-0568.

Ameren Illinois serves 1.2 million electricity customers and 800,000 natural gas customers in central and southern Illinois, with a territory that spans 70% of the State (44,000 square miles). A breakdown of Ameren Illinois' electric and natural gas customers is available in Tables 1 and 2.

[1] Plan 2 was originally filed by Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, and Illinois Power Company d/b/a AmerenIP on September 30, 2010. Before October 1, 2010, Central Illinois Light Company d/b/a AmerenCILCO, Central Illinois Public Service Company d/b/a AmerenCIPS, and Illinois Power Company d/b/a AmerenIP were separate utilities affiliated by virtue of a common parent company. On October 1, 2010, the entities merged into one utility: "Ameren Illinois Company." References herein to "Ameren Illinois" shall refer to "Ameren Illinois Company."

**Table 1: Ameren Illinois Utilities – 2008 Electric Customer Details**

| Rate Class | Deliveries (MWh)(1) | Peak (MW)(2) | #Customers | #All Electric Heating Customers |
|---|---|---|---|---|
| Residential | 11,490,084 | 3,082 | 1,065,087 | 159,667 |
| Small Commercial (<150kW) | 5,455,875 | 1,133 | 146,123 | - |
| Commercial (150kW to 1000kW) | 4,602,694 | 845 | 4,353 | - |
| C&I (>1000kW) | 15,382,179 | 2,171 | 531 | - |
| Street Lighting | 338,082 | - | 1,748 | - |
| TOTAL | 37,268,913 | 7,231 | 1,217,842 | 159,667 |

*1) Delivery MWh, Therms, & # of Customers from 2009 Rate Case E-4 Schedule*
*2) Peak MW and Peak Therm from 2009 Rate Case, Load Research/Corporate Planning Group (CP)*

**Table 2: Ameren Illinois Utilities – 2008 Natural Gas Customer Details**

| Rate Class | Sales (Decatherm) | Peak (Decatherm) | #Customers |
|---|---|---|---|
| Residential Gas Delivery Services | 58,966,346 | 726,702 | 747,560 |
| Small Commercial and Industrial Gas Delivery Services | 27,184,390 | 293,162 | 70,149 |
| Large Commercial and Industrial Gas Delivery Services | 68,439,232 | 260,853 | 528 |
| TOTAL | 154,589,968 | 1,280,717 | 818,237 |

Ameren Illinois' first electric EEDR Plan was approved by the Commission in Docket No. 07-0539. Being both a gas and electric utility and recognizing the benefits of an integrated dual fuel savings portfolio of services for its customers, Ameren Illinois also received approval by the Commission for a voluntary gas energy efficiency plan on October 15, 2008 (Docket No. 08-0104) (collectively referred to as "Plan 1"). Consistent with this philosophy, Ameren Illinois presents Plan 2 with a portfolio that integrates both electric and gas savings measures. Therefore, this electric and gas energy efficiency portfolio of programs for Plan 2 applies to Program Years ("PY") 4, 5, and 6 represented by June 1 through May 31 for the years 2011, 2012, and 2013.

Sections 8-103 and 8-104 of the Act, (220 ILCS 5/8-103, 5/8-104) set forth unmodified electric and gas savings targets, spending limits, and other requirements for Plan 2. In addition, the Act provides for certain demand-response savings targets for the electric portion of Plan 2. Table 3 and Table 4 summarize these unmodified savings targets as well as the electric and gas spending limits.

**Table 3: Unmodified Savings Targets Set Forth in the Act**

| Program Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|---|
| ELECTRIC ENERGY EFFICIENCY & DEMAND RESPONSE | | | | | | | | |
| Incremental % of energy delivered | 0.2% | 0.4% | 0.6% | 0.8% | 1.0% | 1.4% | 1.8% | 2.0% |
| DR: % reduction of prior year peak demand | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% | 0.1% |
| Maximum increase in per kWh rate | 0.5% | 1.0% | 1.5% | 2.0% | 2.015% | 2.015% | 2.015% | 2.015% |
| GAS ENERGY EFFICIENCY | | | | | | | | |
| Incremental % of energy delivered | | | | 0.2% | 0.4% | 0.6% | 0.8% | 1.0% |
| Maximum increase in per therm rate | | | | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |

These targets correspond to the amounts shown in Table 4 for PY4, PY5, and PY6:

**Table 4: Application of Unmodified Savings and Spending Limit Targets (inclusive of Department of Commerce and Economic Opportunity ("DCEO") portion)***

| Program Year (Incremental) | 2011 (PY4) (June 1, 2011 – May 31, 2012) | 2012 (PY5) (June 1, 2012 – May 31, 2013) | 2013 (PY6) (June 1, 2013 – May 31, 2014) |
|---|---|---|---|
| ELECTRIC ENERGY EFFICIENCY & DEMAND RESPONSE | | | |
| Projected Energy Delivery (MWH) | 38,716,487 | 39,263,963 | 39,841,950 |
| Load Reduction Target (MWH) | 309,732 | 392,640 | 557,787 |
| Spending Limit | $59,261,622 | $60,095,066 | $60,733,316 |
| Peak Demand Reduction Target (MW) | 4.42 | 4.20 | 4.16 |
| GAS ENERGY EFFICIENCY | | | |
| Projected Energy Delivery (Therms)(1) | 1,175,903,837 | 1,175,903,837 | 1,175,903,837 |
| Gas Reduction Target (Therms)(2) | 2,351,808 | 4,703,615 | 7,055,423 |
| Spending Limit(3) | $18,535,267 | $18,897,817 | $19,208,343 |

**These figures include the total statutory savings targets and spending limits; inclusive of those DCEO statutory funds and savings targets that are applicable to the Ameren Illinois portfolio.*
*All electric and natural gas savings throughout the document are measured at the point of the customer meter.*
*(1) Revised per the Order to include transportation and retail customers and all therms appropriate under 5/8-104.*
*(2)Revised per the Order as a result of item (1).*
*(3) In accordance with 5/8-104, Ameren Illinois' retail revenues reflect the retail revenues associated with delivery service rates and the retail revenues associated with gas commodity charges (PGA).*

Ameren Illinois' Plan 2 is designed to comply with the Act and incorporate the requirements set forth in the Order. To do so, Ameren Illinois proposes a broad portfolio of cost effective[2] electric and gas energy savings measures available to all customer segments that attain the optimal amount of savings achievable under the required spending limit.

As per the Act, Ameren Illinois will implement 100% of the demand-response measures in Plan 2. Ameren Illinois will implement 75% of the energy efficiency measures. The

[2] Cost-effective is defined by the Act as having a portfolio that meets the total resource cost ("TRC") test. 220 ILCS 5/8-103(a). The Act defers to the Illinois Power Agency Act, 20 ILCS 3855/1-10, for the definition of the total resource cost test. *Id.*

remaining 25% of those energy efficiency measures shall be implemented by the Department of Commerce and Economic Opportunity ("DCEO"). This is interpreted to be a percentage of the portfolio's costs. As per the Act, Ameren Illinois will utilize 75% of the natural gas portfolio's costs, and the remaining 25% shall be used by DCEO to implement energy efficiency measures that achieve no less than 20% of the natural gas target savings.

Table 5 represents Ameren Illinois' calculated electric efficiency portfolio spending limit, gas efficiency portfolio costs, modified electric savings targets and planned gas savings for Plan 2.

**Table 5: Ameren Illinois' Costs and Savings (exclusive of DCEO portion)***

| Program Year | 2011 | 2012 | 2013 |
|---|---|---|---|
| (Incremental) | (June 1, 2011 - May 31, 2012) | (June 1, 2012 - May 31, 2013) | (June 1, 2013 - May 31, 2014) |
| ELECTRIC ENERGY EFFICIENCY & DEMAND RESPONSE | | | |
| Costs(1) | $44,446,217 | $45,071,300 | $45,549,987 |
| Savings (MWH) (2) | 273,534 | 245,871 | 216,495 |
| GAS ENERGY EFFICIENCY | | | |
| Costs(1) | $13,901,450 | $14,173,363 | $14,406,257 |
| Gas Savings (Therms)(3) | 3,735,017 | 4,355,658 | 4,942,447 |

**These figures represent the Ameren Illinois portion of the portfolio costs (i.e., it does not include the DCEO portfolio costs and savings).*
*(1) Revised per the Order. Budgeted costs are exactly equal to the Ameren Illinois portion of the spending cap. For prudent planning purposes, this includes a small budget margin not allocated to any particular program, but assumed to achieve savings at average portfolio costs per unit energy saved. See detail in Tables 12-18.*
*(2) Savings modified per the Order.*
*(3) Gas Savings reflects savings that exceed those required under the Act. Also, Ameren Illinois is only required to achieve their portion of the portfolio statutory savings goals (80%) of those reflected in Table 4.*

## 1.2 Compliance Filing Requirements

The Commission set forth certain requirements for Ameren Illinois' Plan 2.

By incorporating the findings and directives of the Commission, Ameren Illinois now plans to achieve 21% more electric savings, an increase of approximately 150,350 MWH, over what was reflected in the previous Plan 2 filing. Planned electric savings for the Ameren Illinois and DCEO combined portfolio now exceed the unmodified statutory goals for PY 4. In addition, Ameren Illinois' Plan 2 now reflects approximately 1.74 million therm savings beyond that which is required of Ameren Illinois by the Act. These numbers confirm that the Commission's findings and directives have yielded their intended effect—more energy savings for Ameren Illinois' customers. The remainder of this Section describes the Commission's requirements and how Ameren Illinois' Plan 2 incorporates and is compliant with the Commission's Order.

### 1.2.1 Compliance Items that Impact Portfolio Costs and Savings

1. Meet with Stakeholder Advisory Group "SAG" before submitting revised Plan:

    a) In the Order, "[t]he Commission directs Ameren to meet with the SAG before submitting its modified Plan in a compliance filing to this docket in order to determine the impact that Staff and Intervenors' suggestions have on the cost and savings side of its revised Plan, as well as come to a consensus regarding the NTG ratio values to deem for the Plan." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 27.

    Ameren Illinois performed the following activities to meet this directive[3]:

    **January 4, 2011:** Met with the stakeholder group and Commission Staff ("Staff") to review net-to-gross "NTG" ratios. Ameren Illinois applied the

[3] Ameren Illinois notes that it has done what it can to reach a consensus with Staff and the stakeholders regarding NTG values and believes it is compliant with the Order in this regard. Multiple meetings were held between Ameren Illinois, Staff, and other stakeholders. In an effort to reach consensus, Ameren Illinois incorporated virtually all alternate NTG values provided by stakeholders and Staff in the remodeling of Plan 2. Those NTG values are presented in this compliance filing.

most recently available NTG values from the recent PY2 EM&V reports, essentially updating the originally proposed NTG values as requested by Staff witness Hinman. *See* Staff BOE (Corr.), p. 34 (recommending that for programs not yet evaluated as of the date of the Order, NTG values be based on Illinois-specific data). Ameren Illinois incorporated the following NTG values as proposed by the various stakeholders and reviewed by all parties:

- Application of a 0.80 NTG for specialty bulbs.
- Disaggregated the Home Energy Performance ("HEP") HEP program NTG into its respective NTG values per measure.

No other NTG changes were recommended by the stakeholders.

**January 6, 2011:** Received a memorandum from three stakeholder consultants for Natural Resources Defense Council "NRDC", Environmental Law and Policy Center "ELPC", and Attorney General "AG" regarding NTG values and application of the NTG framework. Ameren Illinois responded to the memorandum on **January 9**. Ameren Illinois met with consultants on **January 10**. This series of activities confirmed the following:

- Application of a 0.80 NTG for specialty bulbs.
- Disaggregate the HEP program NTG into its respective NTG per measure.

No other NTG changes were recommended by the stakeholders.

**January 11, 2011:** Meeting with the stakeholder group to review the impact of the Order's changes on savings and costs.

- General consensus to further disaggregation of Business Standard NTG by sub-program, as requested by Staff witness Hinman.
- General consensus to reduce HEP CFL NTG to 0.32, as requested by Staff witness Hinman.

No other NTG values were recommended by Staff or the stakeholders.

**January 11, 2011:** Separate meeting was held with Staff and interested stakeholders reviewing the status of the HEP programs including hurdles, challenges, the status of the current program and key initiatives. Table 18 represents the NTG values reviewed by Staff and the stakeholder group.

**January 18, 2011:** Meeting with stakeholders to recap activities to date and solicit additional feedback. No further NTG values were proposed by Staff or the stakeholders. Some additional review and discussion occurred regarding the impact of remodeling on portfolio savings and costs.

2. Demand Response:

a) To satisfy the Demand Response requirements for Plan 2, the Commission directed Ameren Illinois to "…institute a pilot of the Voltage Optimization Program, to determine what the benefits would be of a wider adoption of this program. The Commission believes that the adoption of a pilot program, with the remainder of the funds directed toward greater energy efficiency, along with other possible demand-response measures, will be appropriate at this time." Specifically, "the pilot should include testing not only the demand response capabilities of the program, but also the energy efficiency capabilities, if implemented on a continuous basis." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 28.

i. Due to this program becoming a pilot, this program budget is now part of the portfolio's research and development ("R&D") budget for which the legislation allows a 3% cap on "breakthrough" technologies.

ii. Previously allotted funds were redistributed in the portfolio, primarily towards the additional costs incurred by the changes in the Order to increase the Lighting and Behavior Modification programs.

iii. Ameren Illinois intends to conduct the pilot as directed in the Order. Any savings claimed are subject to the evaluation results of the pilot program.

3. Increased CFL Sales and Decreased CFL NTG

a) The Commission directed "Ameren to adopt a residential light program more akin to that adopted in previous plan years, taking into account the reduced NTG ratios suggested by Staff, and agreed to by Ameren as discussed later in this Order." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 29.

i. In this compliance filing, Ameren Illinois increased the bulb count from 1.65 million to 4.50 million (over 3 years) to reflect Plan 1 actual and anticipated bulb sales. Residential Lighting program savings increased from 99,346 MWH to 186,876 MWH.

ii. Specialty bulb CFL NTG is now set at 0.80, per the January 4th SAG call.

iii. Annual specialty volume bulbs are "akin" to the PY2 volume (180,000 per year).

iv. Staff's reduced regular CFL NTG values were applied. Ameren Illinois notes that the Staff's recommended CFL NTG decreased portfolio savings from what it would have been otherwise.

**Table 6: CFL Count**

| Total #CFLs | (Regular & Specialty) | | | |
|---|---|---|---|---|
| | PY4 | PY5 | PY6 | Total |
| PREVIOUSLY FILED | 600,490 | 550,259 | 500,010 | 1,650,759 |
| REVISED | 2,001,576 | 1,501,147 | 1,003,719 | 4,506,442 |
| % CHANGE | | | | 173% |

4. Gas Savings Goals

a) As originally filed, Ameren Illinois' Plan 2 excluded therms sold to transportation customers in the calculation of natural gas therm savings goals. Staff argued that therms sold to transportation customers should

be included in the calculation of the natural gas savings goals and proffered natural gas saving goals for PY4-PY6. Staff Ex. 4.0, p. 5, lines 86-102; Staff Ex. 4.2. The Commission agreed with Staff and ordered "that for PY4, PY5, and PY6, the savings goals endorsed by Staff are adopted for this proceeding. The Commission further directs Ameren to include in its compliance filing, a gas savings plan that encompasses the agreed gas spending limit of $56,621,420 and results in the gas savings espoused by Staff and the AG for Plan 2." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 45. Ameren Illinois notes that the agreed gas spending limit is actually $56,641,420.00, as noted earlier in the Order. Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 39.

i. Gas spending was increased to Ameren Illinois' portion of the spending cap, to the extent possible for the 3 years of Plan 2:

**Table 7: Gas Spending Cap**

| | |
|---|---|
| Revised Gas Spending Cap | $56,641,420 |
| Ameren Illinois (75%) | $42,481,070 |
| Ameren Illinois Previously Filed | $23,042,599 |
| Ameren Illinois Revised | $42,209,552 |

ii. Gas savings goals were recalculated to include transportation customers, which increases Ameren Illinois' gas savings goals from 8.5 to 11.2 million therms (over the 3 years).

iii. Ameren Illinois is proposing to exceed those savings in the event it is possible to spending to the cap. While Ameren Illinois need not achieve savings beyond the statutory targets, consistent with the Order, Ameren Illinois will make efforts to spending to the cap "to the extent possible" and achieve savings beyond the stated target.

iv. Limitations in achieving the savings targets in excess of the statutory targets are explained in item 5, "Increased Combination Measures."

v. The following chart shows the gas savings targets originally proposed by Ameren Illinois compared to Staff's proposal, which was approved in the Order. Staff's proposal was to increase the goals to 14,110,846 (including the DCEO portion). Ameren Illinois' portion is 80% of the savings, or 11,288,677, as shown below.

**Table 8: Net Annual Therm Savings (3-Year Total)**

| Plan Year | Ameren IL Filed | Staff Proposed / Ameren IL Revised |
|---|---|---|
| PY 4 Goal | 1,788,394 | 2,351,808 |
| PY 5 Goal | 3,576,788 | 4,703,615 |
| PY 6 Goal | 5,365,183 | 7,055,423 |
| Total 3 year Portfolio Goal (incl. DCEO) | 10,730,365 | 14,110,846 |
| Ameren IL Goal (80%) | 8,584,292 | 11,288,677 |
| Ameren IL Planned | 9,294,971 | 12,933,806 |

5. Increased Combination Measures

a) To optimize electric savings and better position Ameren Illinois for future natural gas savings requirements, the Commission ordered "Ameren to spend 75% of the entire natural gas spending limit, to the extent possible. Funds in excess of those needed to achieve Ameren's natural gas savings goals, as newly calculated and including transportation customers, shall be spent on joint gas-electric savings, to the extent possible." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 29.

b) "The Commission agrees with Staff that Ameren should be allowed to fund a measure resulting in both gas (therm) and electric (kWh) energy savings, and charge the full incentive cost of the measure to the gas portfolio, so long as the measure results in sufficient benefits to gas customers that it is likely to be provided by a gas-only utility. The Commission directs Ameren to claim all electric (kWh) savings associated with measures installed for Ameren's combination electric and gas customers, including measures for which no electric incentive has been paid, as these savings reduce Ameren's deliveries. In addition, the Commission directs Ameren to claim all gas (therm) savings associated with measures installed for Ameren's combination electric and gas customers, including measures for which no gas incentive has been paid, as these savings reduce Ameren's deliveries. However, electric (kWh) savings for measures installed for Ameren's gas-

only customers should not be counted toward Ameren's electric savings goal as these savings do not affect Ameren's electric deliveries.

Likewise, gas (therm) savings for measures installed for Ameren's electric-only customers should not be counted toward Ameren's gas savings goal as these savings do not affect Ameren's gas deliveries. The Commission directs Ameren to adjust its proposed modified incremental percent of energy delivered standards, and corresponding energy savings targets to reflect these changes and include these adjustments in its compliance filing in this docket." Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 29-30; *see also Id.*, p. 45 ("The Commission also directs Ameren to expend excess funds available in any year that are over and above what Ameren expects to spend on gas savings, to the extent possible, toward joint gas-electric savings opportunities that Ameren can identify. While the Commission recognizes that Ameren alone has authority over how it spends these excess funds so long as they are spent in accordance with the requirements of this Order, the Commission expects Ameren to work with the SAG to identify opportunities.")

i. With this filing, Ameren Illinois remodeled the portfolio with increased combination measures using additional gas funds as directed.

ii. Ameren Illinois will use its discretion over how excess funds are spent but will continue to work with the stakeholder group to identify opportunities, per the Order.

iii. These additional funds increased estimated installations for combination measures. Examples include an increase of home audits and ceiling insulation installation.

**Table 9: Increased Combination Measures Delivered to Combination Customers**

| | FILED 9/30/2010 | REVISED 01/20/2011 | % Change |
|---|---|---|---|
| KWH Savings | 61,526,719 | 94,161,396 | 53% |
| Therm Savings | 4,731,607 | 6,075,627 | 28% |
| Electric Budget ($) | $ 5,767,318 | $ 7,972,576 | 38% |
| Gas Budget ($) | $ 6,713,782 | $ 9,579,320 | 43% |

6. Decreased Motors Program

   a) The Commission directed Ameren Illinois to redesign its motors program consistent with the proposal by the AG such that Ameren Illinois' Plan includes only a very limited program targeted only at customers with large motors that plan to rewind rather than replace the motors. "The Commission finds that the record supports the AG's proposed modification of Ameren's proposed motors program and Ameren is directed to do so." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 87.

      i. Ameren Illinois complied with this directive, which resulted in a decrease of electric and gas savings. Action was taken to dramatically reduce the number of small motors that were less than 25 HP and then to reduce the overall Motors budget by 42%. This resulted in a decrease in program kWh savings of 50%.

7. Expanded Behavior Modification Program

   a) The Order noted, "Ameren has proposed a behavior modification program limited to 50,000 customers pending the evaluation of the results of a prior pilot program. . . . CUB recommends that Ameren expand this program to the same level as ComEd's Home Energy Reports program, and include a RFP process to solicit new ideas from third parties. . . . While the behavior modification program is not without its shortcomings, the Commission believes increasing the program to the level of ComEd's Home Energy Reports program is a reasonable proposal. Moreover, CUB's suggestion to include a RFP process to solicit new ideas is a sound one to ensure that the program continues to provide innovative ways for

Ameren to meet its future goals and is hereby adopted as well. CUB's suggestion to apply the California Experimental design should be applied by Ameren's independent evaluator to these programs." Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 87-88.

i. Ameren Illinois estimated the proportion of Behavior Modification participants to ComEd's number of customers and applied that same proportion to determine the appropriate number of Ameren Illinois program participants (i.e. increased the number of participants from 50,000 per year to 67,000 per year).

ii. Ameren Illinois applied the ComEd level of per customer savings (324 kWh applied in this compliance filing vs 245 kWh applied in the initial Plan 2 filing).

iii. Consistent with the Order, Ameren Illinois will develop an RFP process to solicit new ideas to ensure that the program continues to provide innovative ways for Ameren Illinois to meet its future goals. Ameren Illinois will also comply with all other aspects of the Commission's directive.

iv. As a result of these actions, electric and gas savings increased as illustrated below:

**Table 10: Key Changes to Behavior Modification Program**

| | ComEd 3-Year Totals | Ameren Illinois 3-Year Totals | | |
|---|---|---|---|---|
| | | FILED 9/30/2010 | REVISED 01/21/2011 | % Change |
| # Total res elec customers | 10,500,000 | 3,200,000 | 3,200,000 | |
| # Behav Mod participants | 650,000 | 150,000 | 201,000 | 34% |
| % participating | 6.20% | 4.70% | 6.20% | 2% |
| Annual KWH savings/customer | 324 | 245 | 324 | 32% |
| Total MWH savings | | 36,714 | 65,115 | 77% |
| Total Therm savings | | 1,487,725 | 1,993,551 | 34% |

### 1.2.2 Compliance Items that do not Impact the Portfolio Costs and Savings

1. Demand Response
    a) In addition to implementing a pilot Voltage Optimization program for Plan 2, "The Commission fully expects Ameren to endeavor to identify cost-effective demand response measures that might be incorporated in its next energy efficiency and demand response Plan and discuss these with the SAG." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 28.
        i. Ameren Illinois confirms its intention to comply with this directive.

    b) Finally, the Commission directs Ameren to continue to keep the SAG and the Commission apprised of the effectiveness of its real-time pricing PSP program. Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 28.
        i. Ameren Illinois confirms its intention to comply with this directive.

2. On Bill Financing
    a) The Commission did not direct Ameren Illinois to include an on-bill financing program in Plan 2 but did "urge Ameren to pursue this program further." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 28.
        i. Ameren Illinois confirms its intention to pursue this possibility. An RFP was issued, and a financial institution has been selected. Contract negotiations are in process. Internal operations have begun to re-engineer billing and IT systems to accommodate the program. The payback criteria in the legislation limits available measures and may prevent program success.

3. Total Resource Cost Test:
    a) The Commission agreed with Ameren Illinois that "it is appropriate to apply the TRC test at the portfolio level, but Ameren Illinois and the DCEO should be allowed to apply it at the measure or program level if they so choose. The Commission also finds Ameren's proposal to apply the TRC

test at the measure level for planning purposes, if it chooses, and apply any ex post TRC test at the portfolio level is reasonable and is hereby adopted." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 30.

i. Ameren Illinois confirms that no new measures are included in this compliance filing, and as previously filed, all measures pass the TRC test. An annual cost-effectiveness analysis for the portfolio TRC will be provided as part of the annual docket. Note that the TRC analysis cannot be completed until the EM&V reports are completed.

4. Recalculation of Annual Spending Limits

a) The Commission also requires Ameren Illinois to recalculate its electric spending limit annually. The Order states, "[c]onsistent with its previous energy efficiency Order, the Commission agrees with its previous finding that irrespective of the fact that Ameren's Plan may be a comprehensive three-year Plan, the spending limits are based on projections, which, necessarily, need to be re-examined, as they can change from year to year, based on the previous year's figures. The previous year's figures, upon which, those calculations must be made, cannot be known years before the dates enunciated in the statute have occurred. Consistent with the Final Order in Docket No. 07-0539, Ameren is directed to recalculate its projections on an annual basis. (See Final Order, Docket No. 07-0539, Order at 22-23, (Feb. 6, 2008))." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 30.

i. Ameren Illinois confirms that it will recalculate its spending limits on an annual basis for the electric portfolio.

5. Evaluation, Measurement & Verification

a) With respect to EM&V contractor independence, "[t]he Commission directs Ameren to continue the activities listed in its Plan to help preserve the independence of the evaluator. The Commission agrees with Staff that

Ameren should ensure the data used in the independent evaluations can be made available to the Commission upon request. Further, Ameren is directed to instruct its evaluation contractor to submit draft EM&V reports to Ameren, the SAG, and Staff concurrently, and directs Ameren to include such a provision in its contract." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 69. Further, the Commission ordered Ameren Illinois "to include contract language consistent with that adopted in the Order on Rehearing in Docket No. 07-0539" and to "hire its EM&V contractor consistent with the direction provided in the Order on Rehearing in Docket No. 07-0539 and file the appropriate compliance documents" in this docket. *Id.*, pp. 68-69.

i. Ameren Illinois intends to comply with the Commission's directive. Ameren Illinois previously performed this activity voluntarily without direction from an Order and intends to comply throughout Plan 2. As a demonstration, the EM&V contractors distributed the PY2 reports in November and December 2011 to the stakeholder facilitator. Staff continues to be a participant in the routine EM&V conference calls.

ii. With respect to the language from the Order on Rehearing in Docket No. 07-0539, Ameren Illinois will continue to include such language in its EM&V contracts, continue to hire its EM&V contractor consistent with the direction provided in the Order on Rehearing in that case and file the appropriate compliance documents in this docket.

b) The Commission adopted Ameren Illinois' proposal regarding the evaluation cycle: "…the Commission finds that Ameren's final proposal regarding the evaluation cycle is consistent with the AG's objectives. Similarly, the Commission believes that Ameren's final proposal adequately addresses the concerns expressed by NRDC-ELPC. The

three conditions proposed by Staff, to which Ameren does not object, appear reasonable and they are hereby approved."

c) Ameren Illinois intends to comply with the following three conditions proposed by Staff:
    i. Ameren should have all program impact evaluations completed at least three months before filing its next energy efficiency plan (Plan 3):
    ii. Process evaluations should be conducted as early as possible for programs that do not appear to be achieving the gross megawatt-hour savings as forecasted; and
    iii. Since the independent evaluator is supposed to report its findings to the Commission so that the Commission can make a determination as to whether Ameren has met its energy efficiency standards, the final evaluation plans shall be developed at the discretion of the independent evaluator with agreement from Staff.

d) The Commission also adopted Ameren Illinois' proposal for verified participation: "With regard to verified participation and the associated calculations, it appears that Ameren and Staff are in agreement and no party objects to their proposal. The Commission concludes that this proposal is reasonable and it is approved." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 69.
    i. Ameren Illinois intends to comply with this process to determine verified participation.

e) "In order for the Commission to submit the required energy efficiency related reports to the General Assembly, the Commission agrees with Staff and directs Ameren to file the evaluations and reports required by Section 8-103(f)(7) and 8-104(f)(8) of the Act as they become available via

the Commission's e-Docket system in Docket No. 10-0568." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 69.

i. Ameren Illinois will submit evaluations in compliance with this directive.

6. Technical Reference Manual

a) The Commission concluded "it is neither necessary nor appropriate to order a statewide TRM in this proceeding." Instead, the Order "directs that Ameren will work with other utilities subject to the requirements of Section 8-103 and 8-104 of the PUA and the SAG to develop a statewide TRM in the future. This will allow a consistent format to be developed for a TRM. The Commission also accepts Ameren's recommendation that Ameren, as well as ComEd, and the independent evaluators strive to understand differences in evaluation results and to reconcile differences not driven by differences in weather, market and customers. With regard to any suggestion that the SAG should have ultimate responsibility for development of the TRM, Ameren and the SAG should work toward the development of the TRM together." Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 69-70.

i. Ameren Illinois intends to comply with this directive by working with other utilities and SAG to develop a statewide TRM in the future. Ameren Illinois will also work with ComEd and independent evaluators to strive to understand differences in evaluation results and reconcile differences not driven by differences in weather, market, and customers.

b) "Ameren is also directed to provide its annual TRM for stakeholder review. As for CUB's concerns about using funding from Ameren's energy efficiency and demand response programs to pay for a TRM, the Commission is convinced by the arguments of all other parties that the

benefits of a TRM will in all likelihood exceed the costs." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 70.

i. Ameren Illinois will provide its TRM for stakeholder review.

7. Realization rates

a) Ameren Illinois intends to employ the Commission's adopted position regarding realization rates which is, "[t]he Commission has reviewed the rebuttal testimony of Ameren witness Weaver and finds that his proposal for defining realization rates is reasonable for purposes of this proceeding." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 70. The Commission further noted that "it appears that the recommendations regarding realization rates contained in Ameren Ex. 10.0 are reasonable and should therefore be adopted." *Id.*, p. 73.

8. Savings Values

a) Ameren Illinois will employ the Commission's directives regarding fixed values for standard and nonstandard measures. The Commission adopted Ameren Illinois' proposal for fixed values for standard measures and nonstandard measures. The Order stated, "[a]s noted above, Staff supports the prospective application of fixed values to unit savings updated annually for standard measures in calculating plan savings as it increases certainty, reduces risk on the utility, and reduces litigation complexity. The Commission finds Staff's argument convincing and it is hereby adopted. The Commission adopts the fixed values for standard measures proposed by Ameren as found in Staff Group Cross Exhibit No. 1 Part 1, pp. 96-104, and Staff Group Cross Exhibit No. 1 Part 2, pp. 1-80." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 71.

"With regard to nonstandard measures, including Custom and Retro-Commissioning programs, Ameren recommends that savings and cost-effectiveness calculations should be made using estimates of unit impacts

for nonstandard measures that are determined by the independent evaluator. Ameren proposes that unit impacts for nonstandard measures shall be updated annually and applied retrospectively. . . . The Commission finds Ameren's proposal reasonable and it is hereby approved." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 71.

9. Banking Savings

a) Ameren Illinois will bank savings consistent with the Commission's Order, "[t]he Commission grants Ameren the ability to bank savings to the same extent such ability is granted to ComEd in Docket No. 10-0570." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 87.

10. Stakeholder Advisory Group "SAG"

a) "The Commission expands the Illinois Energy Efficiency SAG to cover the gas energy efficiency programs, which is consistent with the approach that Ameren and the SAG have already been taking." Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 86-87.

i. Ameren Illinois supports this conclusion and looks forward to continuing its participation in the natural gas SAG.

11. Reasonableness and Prudence Language in Riders EDR and GER

a) "Staff has proposed that Riders EDR and GER include language indicating that the [sic] Ameren must provide testimony regarding the reasonableness and prudence of costs in each annual reconciliation process. . . . As a result, the Commission finds Staff's proposal to be reasonable. The Commission, however, concludes that Ameren is correct with regard to the filing date and finds its proposed modification of Staff's recommendation to be reasonable." Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 92-93.

i. Ameren Illinois' Riders EDR and GER are the recovery mechanisms contemplated in Sections 5/8-103 and 5/8-104 of

the Act. Ameren Illinois has incorporated the language ordered by the Commission into its revised tariffs, which will be filed pursuant to Commission rules.

## 1.3 Portfolio Summary

Ameren Illinois complies with the Act, and the Order, with a portfolio that achieves the following objectives:

1. Integrates electric energy efficiency portfolio changes as required by the Order while achieving the modified level of electric savings within the electric statutory spending limit and maintaining a diverse portfolio of programs serving all rate classes.

2. Integrates gas energy efficiency portfolio changes as requiredd by the Order and exceeds the gas savings targets as set forth in the Act within the gas statutory spending limit while maintaining a diverse portfolio of programs serving all rate classes.

3. Incorporates cost-effective measures and programs.

4. Incorporates programs using best practice approaches and field experience, while incorporating revisions as required by the Order.

5. Coordinates with the DCEO and all Illinois utility energy efficiency programs.

6. Allows for flexibility to manage risk and uncertainty.

7. Develops scalable programs and portfolios.

8. Leverages current programs and ongoing implementation activities, thus maintaining program momentum.

As per the requirements of the Order, the following tables summarize Ameren Illinois' proposed portfolio (exclusive of the DCEO portfolio) of energy targets, demand targets, and costs for the three year planning period. See Section 6.1 of this document for the total portfolio targets and costs inclusive of the DCEO portfolio.

## Table 11: Ameren Illinois Portfolio Summary

| Energy Efficiency | TRC | Annual MWH Savings | | | Annual MW Savings | | | Annual Therm Savings | | | Annual Program Costs ($ millions) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 |
| RES-Lighting | 2.34 | 82,485 | 61,974 | 42,418 | 2.5 | 1.9 | 1.3 | 0 | 0 | 0 | $ 7.00 | $ 5.21 | $ 3.74 |
| RES-Efficient Products | 1.45 | 11,079 | 11,999 | 13,110 | 2.3 | 2.4 | 2.7 | 324,590 | 463,622 | 552,133 | $ 3.31 | $ 3.59 | $ 3.99 |
| RES-HVAC | 1.44 | 13,448 | 14,187 | 15,109 | 6.4 | 6.8 | 7.2 | 896,800 | 1,147,316 | 1,480,704 | $ 6.84 | $ 8.07 | $ 9.69 |
| RES-Appliance Recycling | 1.96 | 19,889 | 20,070 | 16,036 | 2.9 | 2.9 | 2.3 | 0 | 0 | 0 | $ 2.66 | $ 2.77 | $ 2.28 |
| RES- Home Energy Performance | 1.36 | 2,593 | 2,665 | 2,728 | 0.7 | 0.7 | 0.7 | 100,890 | 103,916 | 107,034 | $ 1.35 | $ 1.41 | $ 1.48 |
| RES-New Construction | 1.02 | 273 | 304 | 329 | 0.1 | 0.1 | 0.1 | 12,831 | 14,268 | 15,449 | $ 0.18 | $ 0.21 | $ 0.23 |
| RES-Multi-family | 1.94 | 4,874 | 5,217 | 5,285 | 0.9 | 1.0 | 1.0 | 247,116 | 290,831 | 313,078 | $ 1.56 | $ 1.79 | $ 1.97 |
| RES-Behavioral Modification | 1.71 | 21,705 | 21,705 | 21,705 | 4.9 | 4.9 | 4.9 | 664,517 | 664,517 | 664,517 | $ 0.96 | $ 0.99 | $ 1.02 |
| RES-Moderate Income | 1.36 | 1,732 | 1,774 | 1,800 | 0.5 | 0.5 | 0.5 | 64,850 | 66,795 | 68,799 | $ 0.83 | $ 0.87 | $ 0.91 |
| RES-Voltage Optimization * | 1.12 | 0 | 0 | 0 | 4.5 | 4.5 | 4.5 | 0 | 0 | 0 | $ 1.06 | $ 1.19 | $ 1.18 |
| **RESIDENTIAL PORTFOLIO TOTAL** | **1.71** | **158,078** | **139,895** | **118,521** | **25.5** | **25.6** | **25.1** | **2,311,593** | **2,751,267** | **3,201,714** | **$ 25.76** | **$ 26.10** | **$ 26.50** |
| BUS-Standard | 1.69 | 47,815 | 40,648 | 37,334 | 20.2 | 17.2 | 15.8 | 1,145,345 | 1,306,813 | 1,429,883 | $ 12.06 | $ 12.45 | $ 13.15 |
| BUS-Custom | 2.02 | 55,620 | 54,490 | 50,648 | 16.3 | 15.9 | 14.8 | 189,043 | 210,919 | 223,281 | $ 11.17 | $ 11.35 | $ 10.91 |
| BUS-RCx | 3.01 | 3,309 | 3,196 | 3,019 | 0.8 | 0.8 | 0.7 | 5,654 | 5,002 | 4,651 | $ 0.28 | $ 0.28 | $ 0.28 |
| BUS-New Construction | 1.30 | 8,194 | 7,123 | 6,454 | 2.9 | 2.5 | 2.2 | 51,483 | 50,035 | 47,131 | $ 2.20 | $ 2.11 | $ 2.06 |
| **BUSINESS PORTFOLIO TOTAL** | **1.82** | **114,938** | **105,458** | **97,456** | **40.1** | **36.3** | **33.5** | **1,391,525** | **1,572,768** | **1,704,945** | **$ 25.71** | **$ 26.19** | **$ 26.39** |
| Ameren Illinois - Portfolio Admin costs | | | | | | | | | | | $ 2.57 | $ 2.60 | $ 2.64 |
| Ameren Illinois - EM&V costs | | | | | | | | | | | $ 1.54 | $ 1.56 | $ 1.59 |
| Ameren Illinois - Education | | | | | | | | | | | $ 1.29 | $ 1.30 | $ 1.32 |
| Ameren Illinois - Marketing | | | | | | | | | | | $ 1.29 | $ 1.30 | $ 1.32 |
| Discretionary Funding Margin ** | | 518 | 518 | 518 | - | - | - | 31,899 | 31,624 | 35,789 | $ 0.19 | $ 0.19 | $ 0.20 |
| **PORTFOLIO TOTAL** | **1.76** | **273,534** | **245,871** | **216,495** | **65.6** | **61.9** | **58.7** | **3,735,017** | **4,355,658** | **4,942,447** | **$ 58.35** | **$ 59.25** | **$ 59.96** |

** Savings are subject to results of pilot program as directed per the Order.*
*** Budgeted costs are exactly equal to the Ameren Illinois portion of the spending cap. For prudent planning purposes, this includes a small budget margin not allocated to any particular program, but assumed to achieve savings at average portfolio costs per unit energy saved.*

**Table 12: Ameren Illinois Portfolio Summary – Electric Energy Savings Targets**

| | Annual MWh | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | 82,485 | 61,974 | 42,418 |
| RES-Energy Efficient Products | 11,079 | 11,999 | 13,110 |
| RES-HVAC | 13,448 | 14,187 | 15,109 |
| RES-Appliance Recycling | 19,889 | 20,070 | 16,036 |
| RES- Home Energy Performance | 2,593 | 2,665 | 2,728 |
| RES-ENERGY STAR New Homes | 273 | 304 | 329 |
| RES-Multifamily | 4,874 | 5,217 | 5,285 |
| RES-Behavior Modification | 21,705 | 21,705 | 21,705 |
| RES-Moderate Income | 1,732 | 1,774 | 1,800 |
| RES-Voltage Optimization | - | - | - |
| RESIDENTIAL PORTFOLIO TOTAL | 158,078 | 139,895 | 118,521 |
| BUS-Standard Incentive | 47,815 | 40,648 | 37,334 |
| BUS-Custom Incentive | 55,620 | 54,490 | 50,648 |
| BUS-Retro-commissioning | 3,309 | 3,196 | 3,019 |
| BUS-New Construction | 8,194 | 7,123 | 6,454 |
| BUSINESS PORTFOLIO TOTAL | 114,938 | 105,458 | 97,456 |
| Savings from Discretionary Funding Margin | 518 | 518 | 518 |
| PORTFOLIO TOTAL | 273,534 | 245,871 | 216,495 |

## Table 13: Ameren Illinois Portfolio Summary – Peak Demand Savings Targets

| | Annual System Coincident Peak MW | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | 2.5 | 1.9 | 1.3 |
| RES-Energy Efficient Products | 2.3 | 2.4 | 2.7 |
| RES-HVAC | 6.4 | 6.8 | 7.2 |
| RES-Appliance Recycling | 2.9 | 2.9 | 2.3 |
| RES- Home Energy Performance | 0.7 | 0.7 | 0.7 |
| RES-ENERGY STAR New Homes | 0.1 | 0.1 | 0.1 |
| RES-Multifamily | 0.9 | 1.0 | 1.0 |
| RES-Behavior Modification | 4.9 | 4.9 | 4.9 |
| RES-Moderate Income | 0.5 | 0.5 | 0.5 |
| RES-Voltage Optimization* | 4.5 | 4.5 | 4.5 |
| RESIDENTIAL PORTFOLIO TOTAL | 25.5 | 25.6 | 25.1 |
| BUS-Standard Incentive | 20.2 | 17.2 | 15.8 |
| BUS-Custom Incentive | 16.3 | 15.9 | 14.8 |
| BUS-Retro-commissioning | 0.8 | 0.8 | 0.7 |
| BUS-New Construction | 2.9 | 2.5 | 2.2 |
| BUSINESS PORTFOLIO TOTAL | 40.1 | 36.3 | 33.5 |
| PORTFOLIO TOTAL | 65.6 | 61.9 | 58.7 |

**Savings subject to results of pilot program per the Order.*

**Table 14: Ameren Illinois Portfolio Summary – Gas Energy Savings Targets ***

| | Annual Therms | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | - | - | - |
| RES-Energy Efficient Products | 324,590 | 463,622 | 552,133 |
| RES-HVAC | 896,800 | 1,147,316 | 1,480,704 |
| RES-Appliance Recycling | - | - | - |
| RES- Home Energy Performance | 100,890 | 103,916 | 107,034 |
| RES-ENERGY STAR New Homes | 12,831 | 14,268 | 15,449 |
| RES-Multifamily | 247,116 | 290,831 | 313,078 |
| RES-Behavior Modification | 664,517 | 664,517 | 664,517 |
| RES-Moderate Income | 64,850 | 66,795 | 68,799 |
| RES-Voltage Optimization | - | - | - |
| RESIDENTIAL PORTFOLIO TOTAL | 2,311,593 | 2,751,267 | 3,201,714 |
| BUS-Standard Incentive | 1,145,345 | 1,306,813 | 1,429,883 |
| BUS-Custom Incentive | 189,043 | 210,919 | 223,281 |
| BUS-Retro-commissioning | 5,654 | 5,002 | 4,651 |
| BUS-New Construction | 51,483 | 50,035 | 47,131 |
| BUSINESS PORTFOLIO TOTAL | 1,391,525 | 1,572,768 | 1,704,945 |
| Savings from Discretionary Funding Margin | 31,899 | 31,624 | 35,789 |
| PORTFOLIO TOTAL | 3,735,017 | 4,355,658 | 4,942,447 |

**Ameren Illinois is responsible for achieving statutory savings goals only, as well as spending its portion of the gas spending cap "to the extent possible."*

## Table 15: Ameren Illinois Portfolio Costs

| | Combined Electric and Gas Costs ($)* | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ 7,000,544 | $ 5,211,826 | $ 3,744,148 |
| RES-Energy Efficient Products | $ 3,312,675 | $ 3,585,304 | $ 3,992,810 |
| RES-HVAC | $ 6,842,494 | $ 8,068,975 | $ 9,689,926 |
| RES-Appliance Recycling | $ 2,664,564 | $ 2,769,487 | $ 2,279,311 |
| RES- Home Energy Performance | $ 1,349,739 | $ 1,410,747 | $ 1,477,507 |
| RES-ENERGY STAR New Homes | $ 184,005 | $ 209,200 | $ 231,935 |
| RES-Multifamily | $ 1,557,780 | $ 1,790,392 | $ 1,971,234 |
| RES-Behavior Modification | $ 963,442 | $ 992,346 | $ 1,022,116 |
| RES-Moderate Income | $ 828,171 | $ 866,304 | $ 908,027 |
| RES-Voltage Optimization | $ 1,059,357 | $ 1,194,957 | $ 1,179,357 |
| RESIDENTIAL PORTFOLIO TOTAL | $ 25,762,769 | $ 26,099,539 | $ 26,496,371 |
| BUS-Standard Incentive | $ 12,058,769 | $ 12,449,088 | $ 13,146,839 |
| BUS-Custom Incentive | $ 11,173,350 | $ 11,350,394 | $ 10,910,102 |
| BUS-Retro-commissioning | $ 282,719 | $ 281,345 | $ 277,755 |
| BUS-New Construction | $ 2,198,462 | $ 2,105,984 | $ 2,059,525 |
| BUSINESS PORTFOLIO TOTAL | $ 25,713,298 | $ 26,186,810 | $ 26,394,222 |
| Ameren Illinois - Portfolio Admin costs | $ 2,568,206 | $ 2,601,766 | $ 2,638,587 |
| Ameren Illinois - EM&V costs | $ 1,543,567 | $ 1,563,783 | $ 1,585,957 |
| Ameren Illinois - Education | $ 1,286,306 | $ 1,303,152 | $ 1,321,631 |
| Ameren Illinois - Marketing | $ 1,286,306 | $ 1,303,152 | $ 1,321,631 |
| Discretionary Funding Margin | $ 187,213 | $ 186,459 | $ 197,846 |
| PORTFOLIO TOTAL | $ 58,347,666 | $ 59,244,662 | $ 59,956,244 |

**Includes costs to incur therm savings in excess of statutory savings.*

## Table 16: Ameren Illinois Costs Allocated to Electric Programs

| | Electric Costs ($) | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ 7,000,544 | $ 5,211,826 | $ 3,744,148 |
| RES-Energy Efficient Products | $ 2,745,963 | $ 2,871,370 | $ 3,178,364 |
| RES-HVAC | $ 4,263,615 | $ 4,636,216 | $ 5,036,419 |
| RES-Appliance Recycling | $ 2,664,564 | $ 2,769,487 | $ 2,279,311 |
| RES- Home Energy Performance | $ 893,931 | $ 931,591 | $ 972,621 |
| RES-ENERGY STAR New Homes | $ 127,585 | $ 145,055 | $ 160,819 |
| RES-Multifamily | $ 933,227 | $ 1,023,339 | $ 1,089,874 |
| RES-Behavior Modification | $ 734,242 | $ 756,270 | $ 778,958 |
| RES-Moderate Income | $ 487,486 | $ 508,265 | $ 531,013 |
| RES-Voltage Optimization | $ 1,059,357 | $ 1,194,957 | $ 1,179,357 |
| RESIDENTIAL PORTFOLIO TOTAL | $ 20,910,513 | $ 20,048,376 | $ 18,950,883 |
| BUS-Standard Incentive | $ 8,530,388 | $ 8,405,761 | $ 8,667,418 |
| BUS-Custom Incentive | $ 10,983,015 | $ 11,121,670 | $ 10,643,474 |
| BUS-Retro-commissioning | $ 276,485 | $ 275,413 | $ 271,820 |
| BUS-New Construction | $ 2,053,370 | $ 1,966,544 | $ 1,925,405 |
| BUSINESS PORTFOLIO TOTAL | $ 21,843,258 | $ 21,769,389 | $ 21,508,117 |
| Ameren Illinois - Portfolio Admin costs | $ 2,192,657 | $ 2,127,780 | $ 2,058,965 |
| Ameren Illinois - EM&V costs* | $ 1,315,594 | $ 1,276,668 | $ 1,235,379 |
| Ameren Illinois - Education | $ 1,096,329 | $ 1,063,890 | $ 1,029,483 |
| Ameren Illinois - Marketing | $ 1,096,329 | $ 1,063,890 | $ 1,029,483 |
| Discretionary Funding Margin | $ 100,000 | $ 100,000 | $ 100,000 |
| PORTFOLIO TOTAL | $ 48,554,680 | $ 47,449,992 | $ 45,912,310 |
| Funds for Combo measures being allocated to Gas Budget | - $ 4,108,463 | -$ 2,378,693 | - $ 362,323 |
| PORTFOLIO TOTAL (Reallocated) | $ 44,446,217 | $ 45,071,300 | $ 45,549,987 |

* *As per the Act's requirements, no more than 3% of Ameren Illinois' budget for the energy efficiency and demand response portfolio costs has been allocated for demonstration of breakthrough equipment and devices or for EM&V.* 220 ILCS 5/8-103(f),(g).

## Table 17: Ameren Illinois Costs Allocated to Natural Gas Programs

| | Natural Gas Costs ($)* | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ - | $ - | $ - |
| RES-Energy Efficient Products | $ 566,712 | $ 713,934 | $ 814,446 |
| RES-HVAC | $ 2,578,879 | $ 3,432,758 | $ 4,653,506 |
| RES-Appliance Recycling | $ - | $ - | $ - |
| RES- Home Energy Performance | $ 455,808 | $ 479,156 | $ 504,886 |
| RES-ENERGY STAR New Homes | $ 56,420 | $ 64,145 | $ 71,116 |
| RES-Multifamily | $ 624,553 | $ 767,053 | $ 881,361 |
| RES-Behavior Modification | $ 229,200 | $ 236,076 | $ 243,158 |
| RES-Moderate Income | $ 340,685 | $ 358,040 | $ 377,014 |
| RES-Voltage Optimization | $ - | $ - | $ - |
| RESIDENTIAL PORTFOLIO TOTAL | $ 4,852,256 | $ 6,051,162 | $ 7,545,488 |
| BUS-Standard Incentive | $ 3,528,381 | $ 4,043,327 | $ 4,479,422 |
| BUS-Custom Incentive | $ 190,335 | $ 228,723 | $ 266,628 |
| BUS-Retro-commissioning | $ 6,233 | $ 5,932 | $ 5,934 |
| BUS-New Construction | $ 145,091 | $ 139,440 | $ 134,121 |
| BUSINESS PORTFOLIO TOTAL | $ 3,870,041 | $ 4,417,422 | $ 4,886,105 |
| Ameren Illinois - Portfolio Admin costs | $ 375,549 | $ 473,987 | $ 579,622 |
| Ameren Illinois - EM&V costs** | $ 227,973 | $ 287,115 | $ 350,578 |
| Ameren Illinois - Education | $ 189,977 | $ 239,263 | $ 292,148 |
| Ameren Illinois - Marketing | $ 189,977 | $ 239,263 | $ 292,148 |
| Discretionary Funding Margin | $ 87,213 | $ 86,459 | $ 97,846 |
| PORTFOLIO TOTAL | $ 9,792,986 | $ 11,794,670 | $ 14,043,935 |
| Funds for Combo measures being allocated from Electric Budget | $ 4,108,463 | $ 2,378,693 | $ 362,323 |
| PORTFOLIO TOTAL (Reallocated) | $ 13,901,450 | $ 14,173,363 | $ 14,406,257 |

**Includes costs to incur therm savings in excess of statutory savings.*

***As per the Act's requirements, no more than 3% of Ameren Illinois' budget for the energy efficiency and demand response portfolio costs has been allocated for demonstration of breakthrough equipment and devices or for EM&V.* 220 ILCS 5/8-104(f),(g).

## 1.4 Portfolio Programs

Ameren Illinois' portfolio is comprised of measures bundled into programs that provide diversity of opportunities for customers of all rate classes. Following is a brief description of the portfolio programs:

**Figure 1: Portfolio Programs**

| | |
|---|---|
| Residential - Lighting | Incentives are provided to the manufacturing and retail partners to increase sales of qualified lighting whereby the end-user receives a discount on the price of ENERGY STAR qualified or other high efficiency lighting products. |
| Residential – Energy Efficient Products | Measures such as ENERGY STAR high-efficiency water heaters, window ACs, smart strips, and pool pumps will be promoted through the mid-stream and upstream levels, achieving both gas and electric energy savings. |
| Residential - HVAC | HVAC diagnostics/tune-up, retrofit, and replacement upgrades for air conditioners, heat pumps, and heating and cooling systems, achieving both gas and electric energy savings. |
| Residential - Appliance Recycling | An incentive is provided to a customer for removing an inefficient refrigerator whereby a turnkey appliance recycling company verifies customer eligibility, schedules pick-up appointments, picks up appliances, recycles and disposes units, and performs incentive processing. |
| Residential - Home Energy Performance (HEP) | Home Energy Performance (HEP) includes a home energy audit, direct install measures, and follow up sealing and insulation measures, achieving both gas and electric energy savings. This program will migrate towards becoming ENERGY STAR by its third year (PY6) with goals of complying with a statewide framework for program design. |
| Residential - ENERGY STAR New Homes | Targets builders with a package of training, technical and marketing assistance, and incentives for construction of ENERGY STAR homes, achieving both gas and electric energy savings. |
| Residential - Multifamily | Provides installation of measures in tenant spaces and common area lighting, exit signs, in addition to walk-through audits and incentives for complex measures, achieving both gas and electric energy savings. |
| Residential - Behavior Modification | Home Energy Reports provide customers with a profile of their energy use, energy efficiency tips, portfolio program information, and a comparison of their energy usage to their "neighbors," encouraging reduced energy use, achieving both gas and electric energy savings. |
| Residential - Moderate Income (Subset of HEP) | Provides increased incentives for energy efficiency improvements and retrofits in moderate income households, achieving both gas and electric energy savings. |
| Business – Standard Incentive | Incents customers to purchase energy efficient measures with predetermined savings values and fixed incentive levels, achieving both gas and electric energy savings. |
| Business – Custom Incentive | Applies to energy efficient measures that do not fall into the Standard Incentive program. These projects normally are complex and unique, requiring separate incentive applications and calculations of estimated energy savings, achieving both gas and electric energy savings. |

| | |
|---|---|
| Business - Retro-Commissioning | Provides options and incentives for businesses to improve operations and maintenance practices for buildings, systems, and processes, achieving both gas and electric energy savings. |
| Business - New Construction | Provides incentives to overcome cost barriers to incorporating energy efficient building design and construction, achieving both gas and electric energy savings. |
| Residential and Business - Demand Response (PILOT) | Replaces outdated controlled capacitor banks in the utility distribution system with Smart Capacitor Banks enabling voltage reduction at the substation level, thereby maintaining a flatter distribution circuit profile, ensuring customers are delivered an acceptable voltage at the end of the circuit while incurring demand reduction and achieving additional kWh savings. |

# 2.0 The Planning Process

Development of Plan 2 for the compliance filing began on the foundation of the planning process used in the original filing. For details on those activities; the development of the measure database, cost effectiveness tests, measure screens, and program development, please refer to the documentation in the initial Plan 2, filed on September 30, 2010 (Revised by way of Errata on October 21, 2010).[4]

In regards to Plan 2, the documentation will focus on the specific modeling changes that were made to comply with the Order. These modeling changes are described below.

**Meeting the revised Gas Savings Goals**

With the inclusion of transportation customers in the calculation of the gas savings goals, as per the Order, the required 3-year total therm savings was changed from 10,730,365 to 14,110,846. With Ameren Illinois responsible for 80% of these savings, and DCEO responsible for the remainder, Ameren Illinois' therm savings goals increased from 8,584,292 to 11,288,677. Gas program deliveries were therefore expanded in the Plan 2 modeling to achieve these goals, as detailed in the figure below.

[4] Familiarity with the initial 2010 EEDR Plan 2 is assumed in this compliance filing. However, further information regarding the initial filing, including the Cadmus study commissioned by Ameren Illinois as well as the robust measure screening procedures used in the original filing, is available in Ameren Ex. 1.1 (Rev.), Docket No. 10-0568, filed October 21, 2010.

**Figure 2: Net Annual Incremental Gas Savings (therms)**

| | FILED 9/30/2010 | | | | REVISED 01/21/2011 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 3-YEAR TOTAL | 2011 | 2012 | 2013 | 3-YEAR TOTAL |
| Ameren Interpreted Statutory Targets | 1,430,715 | 2,861,431 | 4,292,146 | 8,584,292 | 1,881,446 | 3,762,892 | 5,644,338 | 11,288,677 |
| Ameren Planned Therm Savings | 3,042,360 | 3,136,128 | 3,116,482 | 9,294,971 | 3,703,118 | 4,324,035 | 4,906,659 | 12,933,811 |

## Increasing the Residential Lighting Program

To modify the residential lighting program such that it is more akin to its Plan 1 counterpart, the CFL bulb count in Plan 2 was increased approximately threefold from the originally filed Plan 2. This brought the three-year, total CFL bulb count to 4.5 million, which is very similar to the actual and projected Plan 1 three-year bulb count.

Plan 2 Lighting assumptions continued to hedge against increased programmatic difficulties with the approach of EISA's mandated market changes in 2012-2014 by incorporating both declining bulb counts and NTG ratios from year to year for regular CFLs. The magnitude of these hedges, however, was lessened relative to the originally filed Plan 2. The NTG ratios used were those prescribed in the Order upon the recommendation of the ICC Staff.

Specialty CFL bulbs, which are not legislated within the EISA mandates, remain at a steady annual bulb count around 180,000 for each year; which means that they steadily grow in prominence proportional to the declining overall CFL bulb count. This number is based on actual annual sales from Plan 1 performance.

These changes in key assumptions are described in the next figure.

**Figure 3: Residential Lighting Program Revisions**

| | FILED 9/30/2010 | | | | REVISED 01/21/2011 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 3-YEAR TOTAL | 2011 | 2012 | 2013 | 3-YEAR TOTAL |
| Total CFL bulb count | 600,490 | 550,259 | 500,010 | 1,650,759 | 2,001,576 | 1,501,147 | 1,003,719 | 4,506,442 |
| Regular CFL NTG | 0.80 | 0.60 | 0.40 | - | 0.58 | 0.53 | 0.48 | - |
| Specialty CFL NTG | 0.80 | 0.80 | 0.80 | - | 0.80 | 0.80 | 0.80 | - |

### Reducing the Business Motors Program

The Order expressed concern that the Business Motors Program should be reduced in scope, focusing more on large motors that are the most likely to be rewound, thereby sidestepping the requirements of NEMA premium standards. Ameren Illinois dramatically reduced the number of small motors that were less than 25 HP and d the overall Motors budget by 42%. This resulted in a decrease in kWh savings of 50%.

### Consolidating Demand Response and R&D Dollars in the Voltage Optimization Pilot Program

In the originally filed Plan 2, the Voltage Optimization Program, meant to meet the Demand Response goals of the legislation, had a three-year budget of $3.8 million. Separately, R&D had a three-year budget of $4.2 million.

As per the Order, in Plan 2, the Voltage Optimization Program was transformed into a pilot program, and previously allocated R&D budget dollars are now allocated for the Voltage Optimization Pilot Program. Dollars remaining from the balance of the R&D budget and the previous demand response budget were reallocated throughout the portfolio.

### Expanding the Behavior Modification Program

The Order stated that increasing the Behavior Modification Program “to the level of ComEd’s Home Energy Reports program is a reasonable proposal.” To accomplish this, Ameren Illinois aligned its ratio of participating customers to total residential customers

with the same ratio in the ComEd program. Ameren Illinois also increased its estimated annual kWh savings per customer from 245 kWh to 324 kWh to align with ComEd's projected savings per customer. This resulted in a 77% increase in program kWh savings and a 34% increase in program therm savings. These details can be seen in Section 1.2.1 and Table 10 above.

**Increasing Combination Measures using additional gas funds**

Even with the gas savings goals increased as described above, Ameren Illinois did not need to spend up to the statutory gas budget limits to achieve the statutory goals. It was the opinion of the Commission that the remaining dollars under the limit could be used to fund combination measures (those with both electric and gas savings) to be delivered to combination customers (those receiving both electric and gas service from Ameren Illinois). This would enable these gas dollars to create new electric and gas savings for Ameren Illinois customers.

After all the portfolio changes outlined above, Ameren Illinois was able to leverage an additional $6.5 million dollars from the gas budget over 3 years to fund extra combination measures like the Behavior Modification Home Energy Reports described above, the Home Energy Audits in the Home Energy Performance program (up by 15% over the originally filed plan), and ceiling insulation installations (up 224% over the originally filed plan). See details in Section 1.2.1 and Table 9 above.

**Adjusting NTG Ratios with Latest Available Evaluated Results**

As per the Order, regular CFL NTG for residential lighting was obtained from an ICC Staff recommendation to use the same values which ComEd used in their planning. To comply with the Commission's Orders regarding NTG, Ameren Illinois also met with the stakeholders and Staff regarding NTG values. To abide by the Order and opinions of Staff, Ameren Illinois applied NTG values from the newly available, draft EM&V reports from PY 2 then applied other NTG revisions during the compliance filing planning process from Staff and stakeholders as described in section 1.2. The Plan 2 NTG values are shown in Table 18.

**Table 18: NTG Planning Assumptions**

| PROGRAM | Originally Filed Overall NTG Factor | | | Revised Overall NTG Factor<br>Bold = updated based on Staff Recommendation* or PY2 draft EMV results | | |
|---|---|---|---|---|---|---|
| | PY4 | PY5 | PY6 | PY6 | PY5 | PY6 |
| Residential Lighting (regular CFL bulbs) | 0.8 | 0.6 | 0.4 | **0.58*** | **0.53*** | **0.48*** |
| Residential Lighting (other lighting) | 0.8 | 0.8 | 0.8 | 0.80 | 0.80 | 0.80 |
| Residential Energy Efficient Products | 0.8 | 0.8 | 0.8 | 0.80 | 0.80 | 0.80 |
| Residential HVAC | 0.8 | 0.7 | 0.6 | **0.69** | **0.69** | **0.69** |
| Residential Appliance Recycling | 0.54 | 0.54 | 0.54 | **fridges 0.79; freezers 0.82** | **fridges 0.79; freezers 0.82** | **fridges 0.79; freezers 0.82** |
| Residential Home Energy Performance | 0.76 | 0.76 | 0.76 | **aerators 0.99; shwrhds 0.97; pipe wrp 0.93; insul 0.58; air seal 0.58; CFL 0.32; Other 0.76** | **aerators 0.99; shwrhds 0.97; pipe wrp 0.93; insul 0.58; air seal 0.58; CFL 0.32; Other 0.76** | **aerators 0.99; shwrhds 0.97; pipe wrp 0.93; insul 0.58; air seal 0.58; CFL 0.32; Other 0.76** |
| Residential ENERGY STAR New Homes | 0.8 | 0.8 | 0.8 | 0.80 | 0.80 | 0.80 |
| Residential Multifamily | 0.8 | 0.8 | 0.8 | **0.98** | **0.98** | **0.98** |
| Residential Behavior Modification | 1.0 | 1.0 | 1.0 | 1.00 | 1.00 | 1.00 |
| Residential Moderate Income | 1.0 | 1.0 | 1.0 | 1.00 | 1.00 | 1.00 |
| Residential DR | 1.0 | 1.0 | 1.0 | 1.00 | 1.00 | 1.00 |
| Business Standard Incentive | Motors 0.80; Other: 0.73 | Motors 0.80; Other: 0.73 | Motors 0.80; Other: 0.73 | **HVAC 0.47; Lgtng 0.78; Grocery 0.76;Refrig 0.90; Motors 0.63; Small Biz HVAC 1.00; Other 0.76** | **HVAC 0.47; Lgtng 0.78; Grocery 0.76;Refrig 0.90; Motors 0.63; Small Biz HVAC 1.00; Other 0.76** | **HVAC 0.47; Lgtng 0.78; Grocery 0.76;Refrig 0.90; Motors 0.63; Small Biz HVAC 1.00; Other 0.76** |

### Banked Savings

The Order states, "The Commission finds no reason that Ameren and ComEd should be treated differently with regard to banking savings. The Commission grants Ameren the ability to bank savings to the same extent such ability is granted to ComEd in Docket No. 10-0570." Final Order, Docket No. 10-0568 (Dec. 21, 2010), p. 87.

ComEd's ability to bank savings is explained in its Settlement Stipulation, which was accepted by the Commission in that docket. Joint Ex. 1.0, Docket No. 10-0570, p. 2; Final Order, Docket No. 10-0570 (Dec. 21, 2010), p. 53 (adopting the agreement in the Stipulation with respect to banked savings). Thus, Ameren Illinois has the same ability

to bank savings as ComEd and may, among other things, "accumulate and apply 'banked' kWh savings across years -- specifically from PY1 through PY4 for application in PY5 . . . ." (Joint Ex. 1.0, Docket No. 10-0570, p. 2.) Ameren Illinois may also apply banked savings from PY1 through PY5 to PY6. However, the following restrictions apply: (1) "[i]n any given Plan year, no more than 15% of that year's compliance obligation should be met with banked savings from previous Plan years;" and (2) "in any Plan year for which the statutory target has been [modified downward], if the availability of banked savings, including banked savings in excess of 15% of the current year's target, plus planned program savings, would allow [Ameren Illinois] to come closer to reaching the statutory target, the target shall be readjusted upward accordingly." *Id.*

While Ameren Illinois does not anticipate banking many savings throughout Plan 2, it intends to utilize this opportunity to exceed the modified electric goals, if possible.

## 3.0 The Collaborative Process

Parties involved in the Plan 2 development include Staff, SAG, utility portfolio program implementers, the DCEO, Ameren Illinois staff, and Ameren Services Corporation staff. Due to Ameren Illinois already operating both a gas and electric energy efficiency portfolio, all parties already participated in the development of programs that are continuing in this Plan 2. On average, monthly meetings were held with these parties during Plan 1 regarding activities related to the development and status of the Plan 1 portfolio. This experience was leveraged and is again reflected in Plan 2.

In addition to portfolio development over the past three years, several meetings were held throughout 2010 to review issues, objectives, framework, and portfolio details pertaining to Plan 2 with the SAG.[5] SAG participants, meeting dates, meeting materials, agendas, and utility portfolio activity reports can be viewed at http://www.ilsag.org/. The following are SAG meeting dates and agenda items (as worded in the agendas and as found at http://www.ilsag.org/) pertaining to Plan 2's development:

[5] Commission Staff routinely attended these and most SAG meetings via WebEx online conferencing.

January 26, 2010: Results of Ameren Illinois Potential Study. SAG participant program ideas for consideration in next three-year portfolio.

February 23, 2010: SAG participant program ideas for consideration in next three-year portfolio.

April 13, 2010: Ameren Illinois shares planning assumptions (Plan 2). Review of Ameren Illinois potential study and market assessment results (performed by The Cadmus Group). (The Cadmus Group) estimates of achievable potential compared to legislative goals. Impact of potential studies on 2011-2014 planning.

April 27, 2010: Estimates of achievable potential compared to legislative goals. Wasted Energy. (These were SAG participant program ideas for consideration in next three-year portfolio).

May 25, 2010: Planning assumptions for 2011 – 2014 portfolio.

July 13, 2010: Proposed the DCEO Market Sectors for 2011-2014. The DCEO 2011 – 2014 Planning Process and Overview. SAG Suggestions on ”Best Practices” or Experts for August 4 related to schools and local governments.

Preview: August 2, 3, 4 Meetings; Portfolio and Program-level budgets, TRCs, measures. Other information SAG would like to see.

Form of Filing; filing format, Process to develop form, SAG feedback on any additional information requested compared to what was in last filing.

Other Topics Related to 2011 – 2014 Filing; EM&V Contracting Approach, Portfolio Management Flexibility, Proposal: Retain current approach to EM&V Management and Portfolio Flexibility, SAG Input.

Expected Spend and Goals by Year (Electric) – ComEd, Ameren, DCEO; How Derived, Implications for Planning, Proposal: for 2011 – 2014, Re-set goals based on changing annual budget, SAG Input and Feedback.

(Ameren Illinois) Demand Response (“DR”) in 2011 – 2014; Challenges associated with DR Goals, Proposed approach to address challenges, SAG input.

(Ameren Illinois) Overview of Gas Goals and Budget; Statute, How Different from Electric, Complexity.

August 3, 2010: Review of Ameren Illinois 2011-2014 Gas and Electric Energy Savings Portfolio; Key Points, Portfolio Overview, Residential Portfolio, Business Portfolio (including budget, savings and measure list).

August 4, 2010: Technical Planning Issue; Midstream incentives (such as contractor "spiffs" and calculating the TRC. The CFL Story (The Cadmus Group: Impact of EISA on EEPS Lighting Programs).

August 31, 2010: DCEO presents 2011 – 2014 Plans

September 1, 2010: Stakeholder feedback on 2011 – 2014 Portfolios

Stakeholders were encouraged to provide portfolio program suggestions for Plan 2. Following is the name of entities making a program suggestion, a summary of the programs and measures suggested, and how they were addressed by the portfolio:

*Environmental Law and Policy Center:*

- Public Education – included in portfolio.
- Video Games – excluded due to immature market, lack of standards.
- Programmable Thermostats and Thermostat Set-back – included in portfolio.
- Furnace Filters – excluded due to difficulty in quantifying savings.
- Reduce Light at Night – included in Business portfolio (sensors, timers, clocks).

*Midwest Energy Efficiency Alliance:*

- Building Energy Codes – Residential and Business programs incorporate codes and standards as a minimum standard. The DCEO provides training.
- Comprehensive HVAC – included in new program design.
- State HPwES – Ameren Illinois will coordinate with MEEA and utilities to deliver program.

*Optimal Energy, Inc.:*

- Upstream Commercial Lighting – excluded due to success of current program.
- Advanced Building Guidelines – considered for future new construction program.

*Delta Institute:*

- Performance Based Air-sealing –included in portfolio.

*NRDC:*

- Electronics – smart-strips included, TVs excluded due to delivery mechanism difficulties.

*Serious Materials:*

- Highly Insulated Windows – measure did not pass the cost-effectiveness screen for Residential but included in the Business Standard Incentive Program.

*Metropolitan Mayors Caucus:*

- Community Energy Challenge – under consideration.

*Center for Neighborhood Technology:*

- Statewide Multifamily Program – Current Multifamily program is successful in Plan 1. There exists a significant difference between multifamily markets in utility service territories which needs to be reviewed prior to adopting a Statewide approach.
- Financing – on-bill financing is under development.

*Citizens Utility Board:*

- Behavior Modification – included in portfolio.

# 4.0 Implementing the Plan

## 4.1 Implementation Model

Ameren Illinois currently uses a prime implementer model and will continue this model for Plan 2. Ameren Illinois contracted Conservation Services Group ("CSG") to turnkey the Residential portfolio and Science Applications International Corporation ("SAIC") to turnkey the Business portfolio for Plan 1. These implementers delivered both the gas and electric energy efficiency portfolios as an integrated portfolio of services throughout the Ameren Illinois territory. Both implementers provide national expertise in energy efficiency program development, management, and implementation. Both implementers have offices and staff in Peoria, Illinois; the same location as Ameren Illinois energy efficiency department staff. The Ameren Illinois staff acts as contract

managers coordinating program design, implementation, and accountability in collaboration with the prime implementers.

## 4.2 Program Ally Network

Program Allies are contractors who have registered with the utility program and are executing energy efficiency projects that involve incentive funding. Ameren Illinois has developed a successful network of over 700 Residential and 300 Business program allies to deliver the Ameren Illinois portfolio of services.

Developing an educated and quality program ally network is a key element to creating market transformation. Providing incentives through the program ally has proven to be an effective means of promoting and growing the portfolio programs. Incentives provided direct to the program allies encourages them to take ownership of educating consumers and transforming the market. The contractor, not the utility, is often the first point of contact for advice and costs for measure installation by the consumer. Ensuring the program ally is knowledgeable and responsible for discounted installation ensures that the consumer is best able to take advantage of portfolio energy savings. In addition, customers appreciate the ease of not having to apply for a rebate as compared to receiving an immediate discount upon installation.

Business Portfolio

As of August 1, 2010, the Business portfolio had 361 registered program allies. HVAC and Lighting contractors account for the largest segments of contractors. Program allies are educated and cultivated through frequent webinars, semi-annual roundtables, quarterly newsletters, monthly e-mail blasts, and program ally surveys. Ameren Illinois provides program allies use of the program logo in their individual marketing efforts and program supplied standardized brochures. In PY2, program allies can be directly attributed with achieving 61.4% of the Business electric energy savings goal. Informed program allies assist customers regarding familiarity with the program, knowing the requirements for program eligibility, and coordinating the project approval and incentive process. This experience increases the potential that a customer will continue to

participate in the program. In Plan 2, the Business program will employ a strategy of incenting the program ally, most especially in selected categories such as lighting, HVAC, or refrigeration. As the business environment becomes more saturated and there exists increasing difficulty in obtaining participation, incenting the program ally directly is seen to be an increasingly important strategy.

Residential Portfolio

As of August 1, 2010, the Residential portfolio had 709 registered program allies. HVAC allies encompass the largest portion, with 609 program allies. In addition to other contractors, there are also 64 new home construction builders, 19 BPI certified insulation contractors, and 16 HERS raters. Due to the strength of the HVAC program ally network and the success of the HVAC program to date through PY2, the program ally network is considered the most important outreach and marketing tool for the Residential portfolio. Ameren Illinois enables program allies to use the program logo in their individual marketing efforts. Program allies are recruited and trained by individual sales calls and training visits by the implementer staff. Further communication and updates are provided by email communications. The strategy of incenting the program ally, enabling them to provide an immediate discount to the customer at time of installation, has made the program installation discount readily available for the consumer.

## 4.3 Outreach, Marketing and Communications

Outreach, marketing and communications will continue to be an important mechanism for ensuring customers and program allies are aware of, and participate in, portfolio programs. The Act On Energy® brand for marketing the portfolio has become a recognized and award winning campaign encouraging customers to ”take action” to reduce energy consumption. It is also a recognized program name for program allies.

Campaign activities include:

- ActOnEnergy.com acts as a portal for program ally participation providing up-to-date online access to information, instructions, applications, etc. for program participation.
- The website also provides energy savings tips, portfolio program offerings, program ally coordination, incentive applications and more.
- Television, radio, print, direct mail, and magazine advertisements.
- News story press releases resulting in newspaper and television news stories.
- Brochures and literature.
- Conference and special event exhibits.
- Outreach, education seminars, and speaking events.
- Routine webinars, e-mail communication, newsletters, round tables, and customizable brochures for program allies.

Campaign and program awards include:

- 2009 ENERGY STAR for Homes Leadership in Housing Award.
- Chartwell - Best Practices for Utility Marketing 2009.
- MEEA 2009 and 2010 Inspiring Efficiency Innovation Award.
- CEE 2009 EPA Climate Protection Award Winner.
- Platts - Global Energy Award (Award of Excellence).
- Platts Global Energy Awards Finalist for Energy Efficiency Program of the Year.

## 4.4 Stakeholder Involvement

Ameren Illinois is supportive of continuing the current model of stakeholder involvement for both the electric and gas energy efficiency portfolio. Stakeholder participation was inclusive in that there has been no defined membership, and meetings are open to all interested parties. Most entities specified in the Commission's Order in Docket No. 07-0539 for Plan 1 did participate, including the utilities, the DCEO, Staff, the AG, Citizen's Utility Board ("CUB"), environmental and energy advocate organizations, trades, and local government. While the Plan 1 Order for stakeholder involvement did not pertain to

the gas energy efficiency portfolio, Ameren Illinois included the gas portion of the portfolio in the Stakeholder review of Plan 2. In addition to items as specified in the Plan 1 Order, Ameren Illinois collaborated with the Stakeholders in EM&V vendor selection, contracting, work plans, and results.

The Order expanded the stakeholder group to cover the gas energy efficiency measures, Final Order, Docket No. 10-0568 (Dec. 21, 2010), pp. 86-87, which is consistent with the approach Ameren Illinois and the stakeholders have already been taking.

## 5.0 Ameren Illinois Portfolio

This section introduces the programs that Ameren Illinois proposes to include in its Plan 2 energy efficiency portfolio.

Ameren Illinois is committed to achieving savings at minimum cost, requiring an extremely efficient design, implementation, and administration process. Toward this end, Ameren Illinois applied several specific design guidelines, all of which derive from its focus on this commitment:

- Developing and implementing dual energy savings programs ensuring cost sharing across portfolios, minimizing program ally and consumer confusion, providing the best possible opportunity for consumers to achieve energy savings (demonstrating adherence to the requirements of the Act to integrate gas and electric efficiency measures into a single program).

- Implementing new building and appliance standards that have been placed in effect (demonstrating adherence to the requirements of the Act as set forth in 220 ILCS 5/8-103(f)(2); 8-104(f)(2)). Following are examples of how the Ameren Illinois Plan 2 portfolio demonstrates the adherence to new standards:

- The Residential ENERGY STAR New Homes Program is an "above-code" program. The minimum eligibility for the program is 15% energy savings over the 2004 version of the International Energy Conservation Code ("IECC"). Beginning in January 2011, the standard will be 15% better than the 2009 IECC. Ameren Illinois will sponsor code classes for home builders to assist them with the upcoming 2009 IECC compliance requirement. The new Illinois residential building codes have made it difficult to cost justify an ENERGY STAR New Home Construction program due to much more stringent baseline efficiency standards. Despite this, we have been able to design a program that achieves a benefit/cost ratio greater than 1.0.

- The Residential HVAC program is considered an above code program due to using the federal minimum requirements as the baseline. The terms and conditions for program ally participation are that they must abide by all local and/or federal requirements.

- Business new construction projects use existing minimum code requirements as the benchmark and standard. The more efficient the equipment that is installed (above minimum code), the higher the incentive that will be received by the customer for the installation of that equipment.

- The DCEO portion of the Ameren Illinois portfolio provides training and education about codes and standards to program allies.

## 5.1 The DCEO Programs

As per the Act, Ameren Illinois will implement 100% of the demand-response measures in the plans. Ameren Illinois will also implement 75% of the electric energy efficiency measures. The remaining 25% of those electric energy efficiency measures are implemented by the DCEO, and this is interpreted to be the percentage of the portfolio's

costs. Also as per the Act, natural gas utilities shall utilize 75% of the portfolio's costs and the remaining 25% shall be used by DCEO to implement energy efficiency measures that achieve no less than 20% of the target savings. (220 ILCS 5/8-103(e); 8-104(e)). Plan 2 meets these requirements.

The Order provided requirements whereby Ameren Illinois had to revise its electric energy efficiency portfolio savings goals and increase gas energy efficiency portfolio costs, which did not apply to the DCEO portfolio. DCEO filed a separate Plan in the same docket, and any effects on the DCEO budgets and savings were not specified by the changes in the Order. Therefore, these total portfolio tables reflect what was approved in the docket at the time of this compliance filing.

As in Plan 1, the DCEO will administer the residential low income portion of the portfolio.

Table 19 through Table 25 represent the total portfolio with the DCEO component included:

## Table 19: Ameren Illinois and the DCEO Portfolio Summary – Modified Electric Energy Savings

| | Annual MWh | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | 82,485 | 61,974 | 42,418 |
| RES-Energy Efficient Products | 11,079 | 11,999 | 13,110 |
| RES-HVAC | 13,448 | 14,187 | 15,109 |
| RES-Appliance Recycling | 19,889 | 20,070 | 16,036 |
| RES- Home Energy Performance | 2,593 | 2,665 | 2,728 |
| RES-ENERGY STAR New Homes | 273 | 304 | 329 |
| RES-Multifamily | 4,874 | 5,217 | 5,285 |
| RES-Behavior Modification | 21,705 | 21,705 | 21,705 |
| RES-Moderate Income | 1,732 | 1,774 | 1,800 |
| RES-Voltage Optimization | - | - | - |
| RESIDENTIAL PORTFOLIO TOTAL | 158,078 | 139,895 | 118,521 |
| BUS-Standard Incentive | 47,815 | 40,648 | 37,334 |
| BUS-Custom Incentive | 55,620 | 54,490 | 50,648 |
| BUS-Retro-commissioning | 3,309 | 3,196 | 3,019 |
| BUS-New Construction | 8,194 | 7,123 | 6,454 |
| BUSINESS PORTFOLIO TOTAL | 114,938 | 105,458 | 97,456 |
| Savings from Discretionary Funding Margin | 518 | 518 | 518 |
| AMEREN ILLLINOIS PORTFOLIO TOTAL | 273,534 | 245,871 | 216,495 |
| DCEO AMEREN ILLLINOIS TOTAL | 42,026 | 42,399 | 42,496 |
| TOTAL PORTFOLIO | 315,560* | 288,270 | 258,991 |

** The combined Ameren Illinois and DCEO savings listed for PY4 exceed the statutory goals by 5,828 MWh. Ameren Illinois intends to use banked savings to the extent possible, consistent with the Order's provisions, as outlined in Section 2.0.*

## Table 20: Ameren Illinois– Peak Demand Savings

| | Annual MW | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | 2.5 | 1.9 | 1.3 |
| RES-Energy Efficient Products | 2.3 | 2.4 | 2.7 |
| RES-HVAC | 6.4 | 6.8 | 7.2 |
| RES-Appliance Recycling | 2.9 | 2.9 | 2.3 |
| RES- Home Energy Performance | 0.7 | 0.7 | 0.7 |
| RES-ENERGY STAR New Homes | 0.1 | 0.1 | 0.1 |
| RES-Multifamily | 0.9 | 1.0 | 1.0 |
| RES-Behavior Modification | 4.9 | 4.9 | 4.9 |
| RES-Moderate Income | 0.5 | 0.5 | 0.5 |
| RES-Voltage Optimization | 4.5 | 4.5 | 4.5 |
| RESIDENTIAL PORTFOLIO TOTAL | 25.5 | 25.6 | 25.1 |
| BUS-Standard Incentive | 20.2 | 17.2 | 15.8 |
| BUS-Custom Incentive | 16.3 | 15.9 | 14.8 |
| BUS-Retro-commissioning | 0.8 | 0.8 | 0.7 |
| BUS-New Construction | 2.9 | 2.5 | 2.2 |
| BUSINESS PORTFOLIO TOTAL | 40.1 | 36.3 | 33.5 |
| AMEREN ILLINOIS PORTFOLIO TOTAL | 65.6 | 61.9 | 58.7 |

## Table 21: Ameren Illinois and the DCEO Portfolio Summary – Gas Energy Savings

| | Annual Therms | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | - | - | - |
| RES-Energy Efficient Products | 324,590 | 463,622 | 552,133 |
| RES-HVAC | 896,800 | 1,147,316 | 1,480,704 |
| RES-Appliance Recycling | - | - | - |
| RES- Home Energy Performance | 100,890 | 103,916 | 107,034 |
| RES-ENERGY STAR New Homes | 12,831 | 14,268 | 15,449 |
| RES-Multifamily | 247,116 | 290,831 | 313,078 |
| RES-Behavior Modification | 664,517 | 664,517 | 664,517 |
| RES-Moderate Income | 64,850 | 66,795 | 68,799 |
| RES-Voltage Optimization | - | - | - |
| RESIDENTIAL PORTFOLIO TOTAL | 2,311,593 | 2,751,267 | 3,201,714 |
| BUS-Standard Incentive | 1,145,345 | 1,306,813 | 1,429,883 |
| BUS-Custom Incentive | 189,043 | 210,919 | 223,281 |
| BUS-Retro-commissioning | 5,654 | 5,002 | 4,651 |
| BUS-New Construction | 51,483 | 50,035 | 47,131 |
| BUSINESS PORTFOLIO TOTAL | 1,391,525 | 1,572,768 | 1,704,945 |
| Savings from Discretionary Funding Margin | 31,899 | 31,624 | 35,789 |
| AMEREN ILLLINOIS PORTFOLIO TOTAL | 3,735,017 | 4,355,658 | 4,942,447 |
| DCEO AMEREN ILLLINOIS TOTAL | 801,000 | 801,000 | 801,000 |
| TOTAL PORTFOLIO | 4,536,017 | 5,156,658 | 5,743,447 |

## Table 22: Ameren Illinois and the DCEO Portfolio Combined Energy Savings Costs*

| | Combined Electric and Gas Costs ($)* | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ 7,000,544 | $ 5,211,826 | $ 3,744,148 |
| RES-Energy Efficient Products | $ 3,312,675 | $ 3,585,304 | $ 3,992,810 |
| RES-HVAC | $ 6,842,494 | $ 8,068,975 | $ 9,689,926 |
| RES-Appliance Recycling | $ 2,664,564 | $ 2,769,487 | $ 2,279,311 |
| RES- Home Energy Performance | $ 1,349,739 | $ 1,410,747 | $ 1,477,507 |
| RES-ENERGY STAR New Homes | $ 184,005 | $ 209,200 | $ 231,935 |
| RES-Multifamily | $ 1,557,780 | $ 1,790,392 | $ 1,971,234 |
| RES-Behavior Modification | $ 963,442 | $ 992,346 | $ 1,022,116 |
| RES-Moderate Income | $ 828,171 | $ 866,304 | $ 908,027 |
| RES-Voltage Optimization | $ 1,059,357 | $ 1,194,957 | $ 1,179,357 |
| RESIDENTIAL PORTFOLIO TOTAL | $ 25,762,769 | $ 26,099,539 | $ 26,496,371 |
| BUS-Standard Incentive | $ 12,058,769 | $ 12,449,088 | $ 13,146,839 |
| BUS-Custom Incentive | $ 11,173,350 | $ 11,350,394 | $ 10,910,102 |
| BUS-Retro-commissioning | $ 282,719 | $ 281,345 | $ 277,755 |
| BUS-New Construction | $ 2,198,462 | $ 2,105,984 | $ 2,059,525 |
| BUSINESS PORTFOLIO TOTAL | $ 25,713,298 | $ 26,186,810 | $ 26,394,222 |
| Ameren Illinois - Portfolio Admin costs | $ 2,568,206 | $ 2,601,766 | $ 2,638,587 |
| Ameren Illinois - EM&V costs | $ 1,543,567 | $ 1,563,783 | $ 1,585,957 |
| Ameren Illinois - Education | $ 1,286,306 | $ 1,303,152 | $ 1,321,631 |
| Ameren Illinois - Marketing | $ 1,286,306 | $ 1,303,152 | $ 1,321,631 |
| Discretionary Funding Margin | $ 187,213 | $ 186,459 | $ 197,846 |
| AMEREN ILLLINOIS PORTFOLIO TOTAL | $ 58,347,666 | $ 59,244,662 | $ 59,956,244 |
| DCEO AMEREN ILLLINOIS TOTAL | $ 17,139,000 | $ 17,349,000 | $ 17,429,000 |
| TOTAL PORTFOLIO | $ 75,486,666 | $ 76,593,662 | $ 77,385,244 |

**Note that Ameren Illinois' gas portfolio costs exceed costs needed to achieve statutory goals and will be spent to the extent possible.*

## Table 23: Ameren Illinois and the DCEO Portfolio Summary – Electric Energy Savings Costs

| | Electric Costs ($) | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ 7,000,544 | $ 5,211,826 | $ 3,744,148 |
| RES-Energy Efficient Products | $ 2,745,963 | $ 2,871,370 | $ 3,178,364 |
| RES-HVAC | $ 4,263,615 | $ 4,636,216 | $ 5,036,419 |
| RES-Appliance Recycling | $ 2,664,564 | $ 2,769,487 | $ 2,279,311 |
| RES- Home Energy Performance | $ 893,931 | $ 931,591 | $ 972,621 |
| RES-ENERGY STAR New Homes | $ 127,585 | $ 145,055 | $ 160,819 |
| RES-Multifamily | $ 933,227 | $ 1,023,339 | $ 1,089,874 |
| RES-Behavior Modification | $ 734,242 | $ 756,270 | $ 778,958 |
| RES-Moderate Income | $ 487,486 | $ 508,265 | $ 531,013 |
| RES-Voltage Optimization | $ 1,059,357 | $ 1,194,957 | $ 1,179,357 |
| RESIDENTIAL PORTFOLIO TOTAL | $ 20,910,513 | $ 20,048,376 | $ 18,950,883 |
| BUS-Standard Incentive | $ 8,530,388 | $ 8,405,761 | $ 8,667,418 |
| BUS-Custom Incentive | $ 10,983,015 | $ 11,121,670 | $ 10,643,474 |
| BUS-Retro-commissioning | $ 276,485 | $ 275,413 | $ 271,820 |
| BUS-New Construction | $ 2,053,370 | $ 1,966,544 | $ 1,925,405 |
| BUSINESS PORTFOLIO TOTAL | $ 21,843,258 | $ 21,769,389 | $ 21,508,117 |
| Ameren Illinois - Portfolio Admin costs | $ 2,192,657 | $ 2,127,780 | $ 2,058,965 |
| Ameren Illinois - EM&V costs* | $ 1,315,594 | $ 1,276,668 | $ 1,235,379 |
| Ameren Illinois - Education | $ 1,096,329 | $ 1,063,890 | $ 1,029,483 |
| Ameren Illinois - Marketing | $ 1,096,329 | $ 1,063,890 | $ 1,029,483 |
| Discretionary Funding Margin | $ 100,000 | $ 100,000 | $ 100,000 |
| AMEREN ILLINOIS PORTFOLIO TOTAL | $ 48,554,680 | $ 47,449,992 | $ 45,912,310 |
| Funds for Combo measures being allocated to Gas Budget | - $ 4,108,463 | -$ 2,378,693 | - $ 362,323 |
| AMEREN ILLINOIS PORTFOLIO TOTAL (Reallocated) | $ 44,446,217 | $ 45,071,300 | $ 45,549,987 |
| DCEO AMEREN ILLLINOIS TOTAL | $ 14,590,000 | $ 14,800,000 | $ 14,880,000 |
| TOTAL PORTFOLIO | $ 59,036,217 | $ 59,871,300 | $ 60,429,987 |

## Table 24: Ameren Illinois and the DCEO Portfolio Summary –Gas Energy Savings Costs*

| | Natural Gas Costs ($) | | |
|---|---|---|---|
| | PY 4 | PY 5 | PY 6 |
| RES-Lighting | $ - | $ - | $ - |
| RES-Energy Efficient Products | $ 566,712 | $ 713,934 | $ 814,446 |
| RES-HVAC | $ 2,578,879 | $ 3,432,758 | $ 4,653,506 |
| RES-Appliance Recycling | $ - | $ - | $ - |
| RES- Home Energy Performance | $ 455,808 | $ 479,156 | $ 504,886 |
| RES-ENERGY STAR New Homes | $ 56,420 | $ 64,145 | $ 71,116 |
| RES-Multifamily | $ 624,553 | $ 767,053 | $ 881,361 |
| RES-Behavior Modification | $ 229,200 | $ 236,076 | $ 243,158 |
| RES-Moderate Income | $ 340,685 | $ 358,040 | $ 377,014 |
| RES-Voltage Optimization | $ - | $ - | $ - |
| RESIDENTIAL PORTFOLIO TOTAL | $ 4,852,256 | $ 6,051,162 | $ 7,545,488 |
| BUS-Standard Incentive | $ 3,528,381 | $ 4,043,327 | $ 4,479,422 |
| BUS-Custom Incentive | $ 190,335 | $ 228,723 | $ 266,628 |
| BUS-Retro-commissioning | $ 6,233 | $ 5,932 | $ 5,934 |
| BUS-New Construction | $ 145,091 | $ 139,440 | $ 134,121 |
| BUSINESS PORTFOLIO TOTAL | $ 3,870,041 | $ 4,417,422 | $ 4,886,105 |
| Ameren Illinois - Portfolio Admin costs | $ 375,549 | $ 473,987 | $ 579,622 |
| Ameren Illinois - EM&V costs** | $ 227,973 | $ 287,115 | $ 350,578 |
| Ameren Illinois - Education | $ 189,977 | $ 239,263 | $ 292,148 |
| Ameren Illinois - Marketing | $ 189,977 | $ 239,263 | $ 292,148 |
| Discretionary Funding Margin | $ 87,213 | $ 86,459 | $ 97,846 |
| AMEREN ILLINOIS PORTFOLIO TOTAL | $ 9,792,986 | $ 11,794,670 | $ 14,043,935 |
| Funds for Combo measures being allocated from Electric Budget | $ 4,108,463 | $ 2,378,693 | $ 362,323 |
| AMEREN ILLINOIS PORTFOLIO TOTAL (Reallocated) | $ 13,901,450 | $ 14,173,363 | $ 14,406,257 |
| DCEO AMEREN ILLLINOIS TOTAL | $ 2,549,000 | $ 2,549,000 | $ 2,549,000 |
| TOTAL PORTFOLIO | $16,450,450 | $16,722,363 | $16,955,257 |

**Note that Ameren Illinois' gas portfolio costs exceed costs needed to achieve statutory goals and will be spend to the extent possible.*

## 5.2 Portfolio Summary

**Table 25: Ameren Illinois and the DCEO Portfolio Summary**

| Energy Efficiency | TRC | Annual MWH Savings | | | Annual MW Savings | | | Annual Therm Savings | | | Annual Program Costs ($ millions) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 | PY4 | PY5 | PY6 |
| RES-Lighting | 2.34 | 82,485 | 61,974 | 42,418 | 2.5 | 1.9 | 1.3 | 0 | 0 | 0 | $ 7.00 | $ 5.21 | $ 3.74 |
| RES-Efficient Products | 1.45 | 11,079 | 11,999 | 13,110 | 2.3 | 2.4 | 2.7 | 324,590 | 463,622 | 552,133 | $ 3.31 | $ 3.59 | $ 3.99 |
| RES-HVAC | 1.44 | 13,448 | 14,187 | 15,109 | 6.4 | 6.8 | 7.2 | 896,800 | 1,147,316 | 1,480,704 | $ 6.84 | $ 8.07 | $ 9.69 |
| RES-Appliance Recycling | 1.96 | 19,889 | 20,070 | 16,036 | 2.9 | 2.9 | 2.3 | 0 | 0 | 0 | $ 2.66 | $ 2.77 | $ 2.28 |
| RES- Home Energy Performance | 1.36 | 2,593 | 2,665 | 2,728 | 0.7 | 0.7 | 0.7 | 100,890 | 103,916 | 107,034 | $ 1.35 | $ 1.41 | $ 1.48 |
| RES-New Construction | 1.02 | 273 | 304 | 329 | 0.1 | 0.1 | 0.1 | 12,831 | 14,268 | 15,449 | $ 0.18 | $ 0.21 | $ 0.23 |
| RES-Multi-family | 1.94 | 4,874 | 5,217 | 5,285 | 0.9 | 1.0 | 1.0 | 247,116 | 290,831 | 313,078 | $ 1.56 | $ 1.79 | $ 1.97 |
| RES-Behavioral Modification | 1.71 | 21,705 | 21,705 | 21,705 | 4.9 | 4.9 | 4.9 | 664,517 | 664,517 | 664,517 | $ 0.96 | $ 0.99 | $ 1.02 |
| RES-Moderate Income | 1.36 | 1,732 | 1,774 | 1,800 | 0.5 | 0.5 | 0.5 | 64,850 | 66,795 | 68,799 | $ 0.83 | $ 0.87 | $ 0.91 |
| RES-Voltage Optimization | 1.12 | 0 | 0 | 0 | 4.5 | 4.5 | 4.5 | 0 | 0 | 0 | $ 1.06 | $ 1.19 | $ 1.18 |
| **RESIDENTIAL PORTFOLIO TOTAL** | **1.71** | **158,078** | **139,895** | **118,521** | **25.5** | **25.6** | **25.1** | **2,311,593** | **2,751,267** | **3,201,714** | **$ 25.76** | **$ 26.10** | **$ 26.50** |
| BUS-Standard | 1.69 | 47,815 | 40,648 | 37,334 | 20.2 | 17.2 | 15.8 | 1,145,345 | 1,306,813 | 1,429,883 | $ 12.06 | $ 12.45 | $ 13.15 |
| BUS-Custom | 2.02 | 55,620 | 54,490 | 50,648 | 16.3 | 15.9 | 14.8 | 189,043 | 210,919 | 223,281 | $ 11.17 | $ 11.35 | $ 10.91 |
| BUS-RCx | 3.01 | 3,309 | 3,196 | 3,019 | 0.8 | 0.8 | 0.7 | 5,654 | 5,002 | 4,651 | $ 0.28 | $ 0.28 | $ 0.28 |
| BUS-New Construction | 1.30 | 8,194 | 7,123 | 6,454 | 2.9 | 2.5 | 2.2 | 51,483 | 50,035 | 47,131 | $ 2.20 | $ 2.11 | $ 2.06 |
| **BUSINESS PORTFOLIO TOTAL** | **1.82** | **114,938** | **105,458** | **97,456** | **40.1** | **36.3** | **33.5** | **1,391,525** | **1,572,768** | **1,704,945** | **$ 25.71** | **$ 26.19** | **$ 26.39** |
| Ameren Illinois - Portfolio Admin costs | | | | | | | | | | | $ 2.57 | $ 2.60 | $ 2.64 |
| Ameren Illinois - EM&V costs | | | | | | | | | | | $ 1.54 | $ 1.56 | $ 1.59 |
| Ameren Illinois - Education | | | | | | | | | | | $ 1.29 | $ 1.30 | $ 1.32 |
| Ameren Illinois - Marketing | | | | | | | | | | | $ 1.29 | $ 1.30 | $ 1.32 |
| Discretionary Funding Margin | | 518 | 518 | 518 | - | - | - | 31,899 | 31,624 | 35,789 | $ 0.19 | $ 0.19 | $ 0.20 |
| **AMEREN ILLINOIS PORTFOLIO TOTAL** | **1.76** | **273,534** | **245,871** | **216,495** | **65.6** | **61.9** | **58.7** | **3,735,017** | **4,355,658** | **4,942,447** | **$ 58.35** | **$ 59.25** | **$ 59.96** |
| **DCEO AMEREN ILLLINOIS TOTAL** | | **42,026** | **42,399** | **42,496** | | | | **801,000** | **801,000** | **801,000** | **$ 17.14** | **$ 17.35** | **$ 17.43** |
| **TOTAL PORTFOLIO** | | **315,560** | **288,270** | **258,991** | **66** | **62** | **59** | **4,536,017** | **5,156,658** | **5,743,447** | **$ 75.49** | **$ 76.60** | **$ 77.39** |

Consistent with best practice program design principles, Ameren Illinois has designed two broad solutions-based programs, each of which will have multiple program elements. Our objective is to offer customers a broad suite of options to meet their energy management needs, rather than forcing customers to sort through a variety of individual programs. Grouping program elements under these solutions-based umbrellas also enables Ameren Illinois to design sector-based branding, marketing, and awareness building initiatives that encourage customers to take action to manage their energy service needs rather than trying to promote participation in a variety of individual programs.

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

## 5.3 Residential Portfolio of Programs

Following is a description of each of the proposed Residential programs. The Residential portfolio of programs offers a wide range of options for Residential customer energy management. The programs will allow a comprehensive set of home solutions, while providing multiple points of entry to the services offered by Ameren. The programs will adapt over time from an initial focus on individual technology-based solutions to a more comprehensive focus on whole-home solutions that can offer customers the greatest long-term value. Coupled with the outreach and education efforts, the programs are intended to eventually position Ameren Illinois as customers' partner in home energy efficiency improvement.

| 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, Menard's, and Sam's Club. 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. Ameren Illinois will also offer an online store to service customers who do not have a retailer near their location. |
| **Program Duration** | June 2011 – May 2014 |
| **Program Description** | The program will be run through a prime contractor and their subcontractors with significant experience in 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 point of purchase ("POP") rebates to the customer. |

**Lighting**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| 13 w CFL | $ 1 | 46 | 0.00 | 0 | 463,185 | 0 | 9 | $ 3 |
| 18 w CFL | $ 0 | 56 | 0.00 | 0 | 561,735 | 0 | 9 | $ 3 |
| 23 w CFL | $ 0 | 76 | 0.01 | 0 | 758,835 | 0 | 9 | $ 3 |
| CFL bulbs specialty | $ 3 | 67 | 0.01 | 0 | 670,667 | 0 | 9 | $ 13 |
| HID Lamps - Exterior | $ 12 | 603 | - | 0 | 6,030,000 | 0 | 6 | $ 85 |
| Occupancy Sensors | $ 13 | 217 | 0.04 | 0 | 2,170,000 | 0 | 10 | $ 61 |
| CFL Torchiere | $ 10 | 164 | 0.016 | 0 | 1640000 | 0 | 12 | $ 50 |

| | |
|---|---|
| **Implementation Strategy** | Ameren Illinois will hire a prime 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 Ameren Illinois. Key implementation aspects include:<br>• Create marketing material 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 tracking system database will collect and monitor sales data from the field. The tracking system will monitor rebates processed, segmented by retail partner, geographical locations, and sales volume. The tracking system 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 Ameren Illinois will have access to this tracking system at its discretion.<br>• A subcontractor will report 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 Ameren Illinois for review.<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>Additionally, an online store will be available to those customers who either cannot find a local retailer in their area or are more prone to purchase products online. |

**Marketing Strategy**

The primary marketing efforts will be separated into customer awareness and 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:

- POP Materials (hang tags, stickers, etc.)
- Lighting clinics and events at retailers
- Co-op advertising
- Coupons
- Print, radio, television commercials
- Web placement
- Billboards

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.

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| 13 w CFL | 1,529,698 | 1,000,866 | 604,168 | **3,134,732** |
| 18 w CFL | 72,843 | 47,660 | 54,800 | **175,303** |
| 23 w CFL | 218,528 | 272,345 | 164,400 | **655,273** |
| CFL bulbs specialty | 180,507 | 180,276 | 180,351 | **541,134** |
| HID Lamps - Exterior | 11,305 | 18,165 | 15,211 | **44,681** |
| Occupancy Sensors | 1,289 | 1,400 | 1,472 | **4,161** |
| CFL Torchiere | 106,986 | 75,530 | 50,967 | **233,484** |

**Estimated Budget**

| Estimated Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $4,238,670 | $3,224,394 | $2,356,767 | **$9,819,832** |
| Admin | $3,671,944 | $2,664,970 | $1,874,120 | **$8,211,034** |
| **Total** | **$7,910,615** | **$5,889,364** | **$4,230,888** | **$18,030,866** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 128,276 | 98,727 | 68,407 | **296,499** |
| **Net-to-Gross** | 0.64 | 0.63 | 0.62 | **0.63** |
| **Net MWH** | 82,485 | 61,974 | 42,418 | **186,877** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Lighting | **2.34** |

| PROGRAM | Residential Energy Efficient Products |
|---|---|
| Objective | The objective of the Energy Efficient Products Program is to raise customer awareness of the benefits of "high-efficiency" products (ENERGY STAR or better). The Program is meant to encourage customers to purchase qualified appliances, power management, water heaters, window air conditioning units, and programmable thermostats. Also, the program will seek to educate and train retailers, distributors, and contractors to endorse and promote high-efficiency products. |
| Target Market | All residential customers within the Ameren Illinois service territory. |
| Program Duration | June 2011 – May 2014 |
| Program Description | This Program will promote high-efficiency products through the mid-stream and upstream levels. Ameren Illinois will continue to leverage the existing trade ally network of contractors and retail partners with hopes to enroll more program partners to increase market reach and provide a wider coverage of the Ameren Illinois service territory. The Energy Efficient Products Program is meant to be an umbrella program, incorporating various program partners, products, and program delivery strategies.<br><br>The program will actively participate in national ENERGY STAR awareness campaigns developed by ENERGY STAR and in efforts to keep ENERGY STAR specifications up to date and relevant. Similarly, Ameren Illinois will also work with the Consortium for Energy Efficiency ("CEE") to develop efficiency tiers above ENERGY STAR for many products. As appropriate, Ameren Illinois will support these tiers with higher incentives. Depending on specific product parameters, this may provide greater per unit and customer savings, and developing and supporting these tiers also helps accelerate future ENERGY STAR specification revisions. |

**Eligible Measures & Incentive Strategy**

Ameren Illinois will continue to work with its implementation contractor teams to continue to develop incentives for the mid-stream level. Incentives are only paid if and when sales of qualifying products are documented. Program partners do not pay for products sitting in distribution centers, back rooms, or on high racks; they do not pay for products transferred from stores in their service territory to stores outside their territory, or for products returned from a retailer to a manufacturer because sales velocity has been lower than expected.
Other midstream incentives will be paid to the distributor level as well as to contractors responsible for installing measures and assisting customers. The incentives paid to distributors will defray the incremental cost of stocking efficient equipment versus standard, code mandated products. Contractors will receive an incentive based on quantity of units receiving quality installation certification.

For smart strips, the customer will receive the smart strip at no additional cost with the purchase of a qualified entertainment system, which would incorporate multiple components such as a television, audio components, receiver, etc. The cost of this smart strip to the retailer will be reimbursed by Ameren Illinois once the appropriate paperwork is received.
Incentive levels will be developed through a formulaic approach determining the necessary payback to move the market. The appropriate incentive level for each measure will bring the payback down to two years. Incentive levels are by no means fixed and will likely change to reflect market conditions and drive the market participation. The incentive values below represent estimated dollar amounts and will be verified by the implementer at the time of program launch.

**Efficient Products**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| Set-back Thermostat | $ 27 | 493 | - | 71 | 4,930,351 | 6,901,919 | 9 | $ 73 |
| Water Heaters | $ 106 | 815 | 0.14 | 17 | 8,151,370 | 2,246,094 | 15 | $ 346 |
| Low Flow Showerheads | $ 3 | 424 | 0.02 | 22 | 13,901,071 | 2,148,438 | 12 | $ 15 |
| Low Flow Faucet Aerators | $ 1 | 136 | 0.02 | 7 | 1,360,000 | 683,594 | 12 | $ 3 |
| Smart strips | $ 8 | 184 | 0.01 | - | 1,840,000 | - | 5 | $ 40 |
| GCHP | $ 1,177 | 11,936 | 0.02 | - | 119,360,000 | - | 15 | $ 18 |
| Water Heater, Tank Blanket-Insulation | $ 4 | 180 | 0.02 | - | 1,800,000 | - | 10 | $ 18 |
| Pool Pump | $ 18 | 694 | 0.36 | - | 6,940,000 | - | 10 | $ 85 |
| Energy Star Room AC | $ 27 | 101 | 0.09 | - | 1,010,000 | - | 12 | $ 86 |

| | |
|---|---|
| **Implementation Strategy** | Ameren Illinois' primary implementation strategy involves more direct interaction with customers in the form of incentives. Ameren Illinois will offer incentives to retail partners to buy-down the cost of efficient products, and where appropriate, offer instant rebates for certain equipment. If a customer prefers purchasing efficient products online or lives in an area void of retail partners, an online store may be utilized.<br><br>For certain products, including water heaters, a hybrid approach may be utilized. Ameren Illinois will target two categories of program partners: distributors and contractors. An incentive will be offered to distributors to encourage efficient stocking practices, promotion, and sales of high efficiency water heaters. Furthermore, contractors will receive an incentive (based on number of units sold) to encourage consumers to purchase high efficiency water heaters. The existing network of HVAC contractors will be trained and provided with the necessary marketing materials to sell and properly install high-efficiency heating and cooling equipment as well as water heating systems. Plumbing contractors will begin to be recruited to assist with the water heater component of this program as well. By offering incentives at the distributor level as well as to the contractors, Ameren Illinois will increase market reach, leverage contractors' impact on the consumer decision-making process, and provide quick turn-around on the installation of essential household products.<br><br>Ameren Illinois will be offering direct install smart strip power management devices to address the growing consumer electronics market. It is difficult to penetrate the electronics market segment due to fast-paced changes within the industry and high levels of product cannibalization. To address this important category, Ameren Illinois will work with retailers as well as local home entertainment installers to provide a smart strip power management device and educate the customer on the functionality and proper usage of the device – a critical piece to this electronics component. Once the customer purchases an entertainment system (television, audio components, DVD player, etc.), the retailer's installation team will travel to the home and install the system as well as the smart strip, which will help facilitate proper installation and avoid low realization rate issues. Marketing materials will be left with the customer as well as a brief tutorial on proper usage of the device. |

**Marketing Strategy**

Ameren Illinois and its implementation contractors will continue to follow a multi-faceted approach to marketing highly efficient appliances, electronics, and products with an emphasis on ENERGY STAR. In addition to direct advertising targeted at residential customers, Ameren Illinois expects to leverage national ENERGY STAR marketing campaigns and to work collaboratively with industry partners and trade allies at all levels of the retail supply chain.

Among the specific marketing activities targeting residential customers are the following:

- Retail marketing and POP displays.
- TV, radio, print, billboard advertising.
- Ameren Illinois' Act On Energy Website.
- Leveraging marketing budgets through cooperative promotions with retailers, distributors, contractors, and manufacturers including special events at retail stores and in communities.
- Training and supporting retail sales staffs so they are able to tell customers about the benefits of ENERGY STAR appliances and products and to help customers choose the best products to meet their needs.
- Utilize the knowledge and experience of the contractor trade ally network to promote the installation of high-efficiency products and educate the customer on energy efficiency.
- Train and educate retail entertainment installation staff on proper usage, benefits, and cautions of smart power strips.

Ameren Illinois will cross market the Energy Efficient Products program with other RES umbrella programs, i.e., Home Energy Performance, New Homes, Low Income, and Multifamily.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| Set-back Thermostat | 4,879 | 7,300 | 8,840 | **21,019** |
| Water Heaters | 10,659 | 9,084 | 8,614 | **28,356** |
| Low Flow Showerheads | 6,837 | 7,837 | 8,076 | **22,750** |
| Low Flow Faucet Aerators | 12,431 | 14,249 | 14,684 | **41,364** |
| Smart strips | 2,371 | 2,513 | 2,535 | **7,420** |
| GCHP | 173 | 131 | 127 | **430** |
| Water Heater, Tank Blanket-Insulation | 3,736 | 4,219 | 4,282 | **12,236** |
| Pool Pump | 250 | 272 | 317 | **840** |
| Energy Star Room AC | 212 | 232 | 96 | **540** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $1,278,095 | $1,358,552 | $1,523,584 | **$4,160,231** |
| Admin | $1,800,932 | $1,849,010 | $2,020,026 | **$5,669,969** |
| **Total** | **$3,079,027** | **$3,207,563** | **$3,543,610** | **$9,830,200** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $261,545 | $335,527 | $388,060 | **$985,131** |
| Admin | $402,750 | $508,304 | $580,206 | **$1,491,260** |
| **Total** | **$664,295** | **$843,831** | **$968,266** | **$2,476,392** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 13,848 | 14,999 | 16,388 | **45,235** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 11,079 | 11,999 | 13,110 | **36,188** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 49,829 | 45,346 | 36,825 | **132,000** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net Therms** | 324,590 | 463,622 | 552,133 | **1,340,345** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Efficient Products | **1.45** |

| PROGRAM | Residential HVAC |
|---|---|
| Objective | Obtain energy and demand savings through improvement in the operating performance of existing residential cooling units or replacement of existing furnaces and/or central AC units and heat pumps. |
| Target Market | Residential customers with central AC units, heat pumps, and/or natural gas furnaces. |
| Program Duration | June 2011 – May 2014 |
| Program Description | This program covers most aspects 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 Ameren Illinois' service area. Ameren Illinois 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 and new gas furnaces, as well as replacing legacy heating and cooling systems within the home. The baseline efficiency conditions for new and replacement cooling and heating systems are applicable federal equipment standards and applicable building codes. Air conditioning systems are typically oversized relative to the cooling load and are usually not operating at manufacturer's specifications at install. The baseline conditions for existing air conditioning systems usually include refrigerant charge and airflow across the coils not within manufacturer's specifications and leaky ducts. In many cases, ducts are undersized. |
| Eligible Measures & Incentive Strategy | |

**HVAC**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| ASHP | $ 122 | 684 | 0.61 | - | 6,835,322 | - | 12 | $ 403 |
| DFHP | $ 127 | 922 | 0.64 | - | 9,223,548 | - | 12 | $ 419 |
| Duct Insulation | $ 64 | 278 | 0.04 | 42 | 2,777,644 | 4,061,146 | 20 | $ 220 |
| Duct location | $ 258 | 706 | 0.15 | 91 | 7,057,806 | 8,879,646 | 20 | $ 1,650 |
| Duct sealing | $ 18 | 305 | 0.08 | 41 | 3,054,704 | 3,967,165 | 18 | $ 73 |
| ECM Blower | $ 148 | 931 | 0.23 | - | 9,313,715 | - | 15 | $ 480 |
| Furnace | $ 322 | 524 | 0.26 | 176 | 5,241,426 | 19,394,614 | 15 | $ 1,043 |
| AC | $ 118 | 506 | 0.45 | - | 5,062,668 | - | 12 | $ 381 |
| Air Sealing | $ 73 | 620 | 0.16 | 96 | 6,198,244 | 9,320,547 | 13 | $ 264 |
| HVAC Tune Up | $ 45 | 128 | 0.17 | 24 | 1,276,302 | 2,339,664 | 10 | $ 129 |
| PTAC/PTHP | $ 50 | 328 | 0.12 | - | 3,278,478 | - | 15 | $ 155 |
| Setback Thermostat | $ 26 | 493 | - | 83 | 4,930,351 | 6,901,919 | 9 | $ 73 |
| Ground Source Heat Pump | $ 1,010 | 11,936 | 0.71 | - | 119,360,000 | - | 15 | $ 8,400 |

| | |
|---|---|
| **Implementation Strategy** | Ameren Illinois 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 Ameren Illinois. Key implementation aspects include:<br>• Targeted marketing approach for contractor recruitment and training. Developing a consistent and robust educational component will help deliver an effective program. Training will commence once contractors enter into the participation agreement.<br>• 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.<br>Once contractors are trained, they can utilize the techniques and incentives provided by Ameren Illinois to improve sales of highly efficient HVAC equipment and effectively diagnose and improve existing system inefficiencies. Ameren Illinois will provide incentives at the mid-stream (contractor) level to encourage sales of energy efficient products and for properly installed HVAC energy saving upgrades.<br><br>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 has a few key components:<br><br>• If the unit is not properly adjusted, predetermined diagnostic testing protocols instruct the technician to perform the appropriate repairs and re-test the system. *This step ensures that systems are not qualified for replacement based on correctable problems. It also delivers tune-ups to improve the energy performance of systems that are not replaced.*<br>• Replacement systems are commissioned using the same diagnostic testing. *This step verifies the rated efficiency of the new system and verifies that it is properly installed and operating. This closes the loop in documenting the energy savings delivered by the replacement.* |

| | |
|---|---|
| **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 Illinois residential customers who are most likely to have inefficient heating and 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 to support all aspects of the program, especially materials for customers and contractors.<br>Contractor training will not only provide avenues to improve the qualified installation/retrofit community of HVAC professionals, but also provide information and education on Ameren Illinois' portfolio of residential energy efficiency programs. The implementation contractor will provide small amounts of marketing materials and hold brief question and answer type sessions describing other programs such as the Ameren Illinois Energy Efficient Products program. |

## Estimated Participation

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| ASHP | 233 | 177 | 169 | **579** |
| DFHP | 18 | 12 | 13 | **42** |
| Duct Insulation | 1,601 | 1,773 | 1,882 | **5,255** |
| Duct location | 531 | 588 | 623 | **1,742** |
| Duct sealing | 1,857 | 2,091 | 2,118 | **6,066** |
| ECM Blower | 8,885 | 10,131 | 11,027 | **30,044** |
| Furnace | 3,506 | 4,926 | 7,036 | **15,468** |
| AC | 6,731 | 5,698 | 5,095 | **17,523** |
| Air Sealing | 3,193 | 3,510 | 3,707 | **10,410** |
| HVAC Tune Up | 13,704 | 16,823 | 20,845 | **51,373** |
| PTAC/PTHP | 1,649 | 1,745 | 2,243 | **5,638** |
| Setback Thermostat | 1,418 | 1,641 | 1,682 | **4,741** |
| Ground Source Heat Pump | 149 | 113 | 109 | **371** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $2,913,649 | $3,221,957 | $3,548,468 | **$9,684,074** |
| Admin | $1,883,609 | $1,994,214 | $2,124,148 | **$6,001,971** |
| **Total** | **$4,797,258** | **$5,216,171** | **$5,672,616** | **$15,686,045** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $1,748,319 | $2,365,011 | $3,247,729 | **$7,361,059** |
| Admin | $1,186,441 | $1,536,760 | $2,029,271 | **$4,752,471** |
| **Total** | **$2,934,760** | **$3,901,771** | **$5,276,999** | **$12,113,530** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 19,489 | 20,561 | 21,897 | **61,947** |
| **Net-to-Gross** | 0.69 | 0.69 | 0.69 | **0.69** |
| **Net MWH** | 13,448 | 14,187 | 15,109 | **42,743** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 49,829 | 45,346 | 36,825 | **5,108,435** |
| **Net-to-Gross** | 0.69 | 0.69 | 0.69 | **0.69** |
| **Net Therms** | 896,800 | 1,147,316 | 1,480,704 | **3,524,820** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES HVAC | **1.44** |

| PROGRAM | Residential Appliance Recycling |
|---|---|
| **Objective** | Promote the retirement and recycling of secondary, inefficient refrigerators, freezers and, if applicable, other qualifying appliances from households and/or businesses 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 on or before 2001. In special cases, small business customers having secondary refrigerators, freezers, or other qualifying equipment may be eligible for the program depending on project specifics. Ameren Illinois will also evaluate primary refrigerators, freezers, and other appliances to determine if they merit consideration. |
| **Program Duration** | June 2011 – May 2014 |
| **Program Description** | The contractor, acting on behalf of Ameren Illinois, 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. In contractor selection, preference will be given to appliance recycling companies that have recycling/disposal facilities located in Illinois or that are willing to construct such facilities given the anticipated volume resulting from the program. Recycling/disposal practices will be designed to prevent the release of chlorofluorocarbons ("CFCs").<br><br>Turnkey program implementation through an appliance recycling contractor will simplify program delivery, reduce Ameren Illinois' administrative costs, and ensure a streamlined participation process. The program will be 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 evolves beyond the initial ramp-up period and ongoing EM&V activities track program performance, Ameren Illinois may revise incentive amounts as the market dictates. 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 | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| Refrigerator recycling | $ 35 | 1260 | 0.2 | - | 12,600,000 | - | 6 | $ - |
| Freezer recycling | $ 35 | 1247 | 0.2 | - | 12,470,000 | - | 5 | $ - |
| Room AC recycling | $ 35 | 113 | 0.1 | - | 1,130,000 | - | 8 | $ - |

**Implementation Strategy**

Key elements of the Appliance Recycling Program implementation strategy include:

- **Outsourcing implementation**: A regional/national appliance recycling company will provide comprehensive, turnkey implementation services from eligibility verification to proper disposal/recycling of turned-in refrigerators.
- **Customer education/recruitment**: The contractor will develop and implement the marketing strategy. There will be a consumer marketing and education component 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 targets.

**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. Marketing materials will also include messaging about the benefits of ENERGY STAR qualified new equipment, as some secondary refrigerators will eventually be replaced with new equipment. The program will 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.

Anticipated marketing materials will include:

- Web content
- Bill stuffers and other direct mail
- Limited mass market advertising around special promotions
- TV, radio
- Garage Sale ads, promotional handouts to LIHEAP agencies, realtors, and appliance retailers
- Door-hangers, truck wraps
- Billboards

Ameren Illinois will explore additional marketing strategies that may increase opportunities for appliance re-cycling by possibly providing incentives to customers to replace existing inefficient primary refrigerators. In addition, Ameren Illinois will work with retailers to determine if there are opportunities to re-cycle used appliances that are targeted to be sold in the secondary markets.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| Refrigerator recycling | 14,684 | 14,817 | 11,839 | **41,339** |
| Freezer recycling | 4,968 | 5,013 | 4,006 | **13,987** |
| Room AC recycling | 1,461 | 1,475 | 1,179 | **4,115** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $2,664,564 | $2,769,487 | $2,279,311 | **$7,713,362** |
| Admin | $346,393 | $360,033 | $296,310 | **$1,002,737** |
| **Total** | **$3,010,957** | **$3,129,521** | **$2,575,621** | **$8,716,099** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 24,861 | 25,087 | 20,045 | **69,994** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 19,889 | 20,070 | 16,036 | **55,995** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Appliance Recycling | **1.96** |

| PROGRAM | Residential Home Energy Performance |
|---|---|
| Objective | To educate residential customers about energy use in their homes and to offer information, products, and services to residential customers to save energy cost effectively. This allows the customer to identify and initiate the process of installing cost-effective energy efficiency upgrades and practices. The Home Energy Performance ("HEP") program itself has multiple components. In addition, it provides yet another entryway for customers to take advantage of Ameren Illinois' entire portfolio of residential energy solutions. |
| Target Market | All existing single family residential homes. |
| Program Duration | June 2011 – May 2014 |
| Program Description | HEP is an energy efficiency program focused on a whole house approach. An implementation contractor will market and administer the program, leveraging Ameren Illinois' existing trade ally network of subcontractors. The prime contractor will market various services including energy audits, air sealing, insulation, and highlight free direct-install measures (CFLs, Faucet Aerators, and High Efficiency Shower Heads, Hot Water Pipe Insulation). The sub contractor will begin with an energy audit and recommend various energy efficiency measures found in Ameren Illinois' portfolio based off the audit findings. In addition, as warranted, the contractor will coordinate with the HVAC New Equipment Program to deliver various program services as determined by the audit. The contractor will direct the homeowner to Ameren Illinois' Lighting and Energy Efficient Products programs for additional discounted home energy efficiency measures. |

**Eligible Measures & Incentive Strategy**

There will be multiple incentive strategies for the Home Energy Performance program, as energy savings can be delivered through multiple avenues, including:

- Direct Install (100% incentive to customer) of measures including CFLs, high efficiency shower heads and faucet aerators, as well as hot water pipe wrapping.
- Mid-stream incentives paid to subcontractors for follow-up measure installation.
- Donations or other program funding for the community organizations assisting in the promotion of the Program. Ameren Illinois will work closely with state and federal groups in determining how state and federal funding, including potential HomeStar federal funding, can be used to improve the effectiveness of the program.
- On the invoice presented to the customer, the incentives will be displayed as a line item to identify the marked-down price of the audit via program incentives to contractors.

Incentive levels will be guided by a formulaic approach determining the necessary payback to move the market. The appropriate incentive level for each measure will bring the payback down to two years. Incentive levels are by no means fixed and will likely change to reflect market conditions and drive the market participation. The incentive values below represent estimated dollar amounts and will be verified by the implementer at the time of program launch.

Some measures may qualify to receive additional incentives. As part of the Residential Moderate Income program, supported by the Energy Assistance Foundation, customers falling into the 200% - 300% of poverty class can receive additional incentive funding for selected energy efficiency improvements. This extended incentive level is meant to drive participation and increase program awareness in multiple market segments of Ameren Illinois' service territory.

The incentive levels reflected below were developed using a formulaic approach, bringing each measure's payback to 2 years. Based on market experience and national best practice, a two year payback falls in the range of incentive amounts needed to drive customer participation. These incentive values are subject to change and are solely illustrative.

| Home Energy Performance | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
| Wall Insulation | $ 113 | 358 | 0.06 | 54 | 3,582,248 | 5,237,058 | 20 | $ 357 |
| Duct Insulation | $ 64 | 278 | 0.04 | 42 | 2,777,644 | 4,061,146 | 20 | $ 220 |
| Ceiling Insulation | $ 464 | 248 | 0 | 201 | 2,475,000 | 20,091,500 | 20 | $ 1,500 |
| Duct location | $ 258 | 706 | 0.15 | 91 | 7,057,806 | 8,879,646 | 20 | $ 1,650 |
| Duct sealing | $ 18 | 292 | 0.08 | 39 | 2,921,549 | 3,796,393 | 18 | $ 73 |
| ECM Blower | $ 148 | 931 | 0.23 | - | 9,313,715 | - | 15 | $ 480 |
| AC | $ 113 | 505 | 0.45 | - | 5,052,280 | - | 12 | $ 367 |
| Furnace | $ 369 | 524 | 0.26 | 166 | 5,241,426 | 18,315,176 | 15 | $ 1,193 |
| Air Sealing | $ 73 | 620 | 0.16 | 96 | 6,198,244 | 9,320,547 | 13 | $ 264 |
| setback Thermostat | $ 26 | 493 | - | 71 | 4,930,351 | 6,901,919 | 9 | $ 73 |
| CFL | $ 10 | 53 | 0.00 | - | 528,773 | - | 9 | $ 10 |
| Water Heater | $ 116 | 980 | 0.17 | 17 | 9,795,000 | 2,246,094 | 15 | $ 376 |
| Pipe Wrap | $ 10 | 257 | 0.03 | 58 | 2,570,000 | 1,074,219 | 6 | $ 10 |
| Low Flow Showerheads | $ 43 | 424 | 0.05 | 22 | 4,240,000 | 2,148,438 | 12 | $ 42 |
| Low Flow Faucet Aerators | $ 14 | 136 | 0.02 | 7 | 1,360,000 | 683,594 | 12 | $ 14 |
| Smart Strip | $ 41 | 184 | 0.01 | - | 1,840,000 | - | 5 | $ 40 |
| Radiant Barrier | $ 135 | 171 | 0.05 | 14 | 1,710,000 | 1,367,188 | 30 | $ 436 |
| Geothermal DeSuperheater | $ 49 | 1,540 | 0.17 | - | 15,400,000 | - | 10 | $ 239 |
| Water Heater, Tank Blanket-Insulation | $ 77 | 180 | 0.02 | - | 1,800,000 | - | 10 | $ 51 |
| Water Heater, Thermostat Setback | $ 8 | 163 | 0.02 | 11 | 1,630,000 | 1,074,219 | 4 | $ 8 |

| | |
|---|---|
| **Implementation Strategy** | Customer billing analysis will be conducted to identify customers with the greatest savings potential. Potential segments to target include high use customers, all electric customers, and hard to reach segments which are sometimes underserved by other programs (rural agricultural customers, low income, or elderly). Various forms of marketing including direct mail, community outreach events, and direct calling will be utilized to maximize participation.<br><br>The contractor will develop and train qualified Energy Advisors to assess residential homes.<br><br>The contractor will develop a call center to handle follow-up work questions and scheduling.<br><br>The audit will involve 4 main steps. First, the auditor will sit down and conduct a short interview with the customer, outlining the program and the services he/she can provide. Next, the auditor will make direct installations including CFLs, high efficiency faucet aerators and shower heads, and hot water pipe wrap. The auditor then conducts a walk-through audit, identifying areas of improvement in infiltration and heat loss through the walls and attic space. In addition, if a central air conditioner is present, the assessment will include identification of the age and size of the unit and the last service date. The last step involves the auditor leaving a list of BPI certified contractors qualified to complete the recommended efficiency installations. Contractor list generation will be based on types of improvements recommended, geographic proximity to the audited home, and quality of past work with the program.<br><br>The contractor will be responsible for developing software capable of incorporating audit results to generate real-time reports for the customer. The report will be informed by utility billing data (to the extent it is available) and will summarize existing household energy characteristics, suggested improvements from the audit, and chart available incentives for the project follow-up work. The software should also have functionality to generate contractor proximity based off zip codes.<br><br>Post audit, a list of qualified subcontractors will be left with the homeowner. The homeowner can contact the call center to arrange for HVAC and insulation contractor appointments. If the customer does not call after 1-2 weeks, the call center will initiate contact with the customer to ask if the customer is considering the follow-up work. If a subcontractor off the list is preferred by the customer, the call center will schedule accordingly. |

| | |
|---|---|
| **Marketing Strategy** | The marketing strategy will focus on targeted market segments of customers encompassing large energy users, hard-to-reach customers, and underserved market segments. The HEP program is closely intertwined with the Moderate Income and HVAC programs.<br>The contractor will conduct a billing analysis to identify high-use customers and leverage Ameren Illinois databases highlighting underserved market segments. These target markets will receive either a direct mail or some community informational session to spark interest in the program. Next, for the HEP component of the program, customers will be contacted directly by the contractor. Furthermore, to increase interest and motivate customers to implement the audit recommended measures, a "neighborhood awareness" strategy will be employed where the contractor identifies common improvements being implemented by homes in close proximity to the home being audited. This social pressure will help inform the customer and drive participation rates higher.<br><br>To initiate contact and broaden the network of trade allies associated with the HEP component, Ameren Illinois will consult various community organizations to communicate the benefits of the program within their respective social circles. Instructing these community leaders on how the program works and the benefits of energy efficiency will provide a trusted network of Ameren Illinois spokespersons that the communities can identify with. These "social sales-reps" will have marketing brochures identifying potential efficiency improvements, benefits of participating in the program, a marketing survey to fill out, and rebates for CFLs from the online store, contingent upon the completion of the short survey. These "social sales-reps" will promote the program in their community meetings, seminars, weekly sports leagues, etc. to reach a broad audience in a concentrated environment. |

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Wall Insulation | 11 | 12 | 12 | **35** |
| Duct Insulation | 36 | 37 | 38 | **110** |
| Ceiling Insulation | 222 | 228 | 235 | **685** |
| Duct location | 3 | 3 | 3 | **9** |
| Duct sealing | 48 | 49 | 50 | **147** |
| ECM Blower | 42 | 43 | 44 | **130** |
| AC | 19 | 19 | 20 | **58** |
| Furnace | 27 | 28 | 28 | **83** |
| Air Sealing | 48 | 49 | 50 | **147** |
| setback Thermostat | 95 | 98 | 101 | **294** |
| CFL | 19,913 | 20,510 | 21,125 | **61548** |
| Water Heater | 36 | 37 | 38 | **110** |
| Pipe Wrap | 36 | 37 | 38 | **110** |
| Low Flow Showerheads | 4,466 | 4,600 | 4,738 | **13805** |
| Low Flow Faucet Aerators | 8,933 | 9,201 | 9,477 | **27610** |
| Smart Strip | 865 | 891 | 917 | **2672** |
| Radiant Barrier | 12 | 12 | 13 | **37** |
| Geothermal DeSuperheater | 10 | 11 | 11 | **32** |
| Water Heater, Tank Blanket-Insul | 262 | 270 | 278 | **810** |
| Water Heater, Thermostat Setbac | 447 | 460 | 474 | **1381** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $475,939 | $500,753 | $526,911 | **$1,503,604** |
| Admin | $544,313 | $562,780 | $583,660 | **$1,690,753** |
| **Total** | **$1,020,252** | **$1,063,533** | **$1,110,571** | **$3,194,357** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $243,617 | $258,453 | $274,193 | **$776,262** |
| Admin | $261,336 | $272,158 | $284,819 | **$818,314** |
| **Total** | **$504,953** | **$530,611** | **$559,012** | **$1,594,576** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 3,368 | 3,461 | 3,497 | **10,327** |
| **Net-to-Gross** | 0.77 | 0.77 | 0.78 | **0.77** |
| **Net MWH** | 2,593 | 2,665 | 2,728 | **7,986** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 126,112 | 129,896 | 133,792 | **132,000** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net Therms** | 100,890 | 103,916 | 107,034 | **311,840** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Home Energy Performance | **1.36** |

| PROGRAM | Residential ENERGY STAR New Homes |
|---|---|
| **Objective** | To increase consumer awareness of and demand for ENERGY STAR version 3.0 single family homes while increasing the building industry's willingness and ability to construct ENERGY STAR homes. This program's primary goal is to achieve energy savings through sales of ENERGY STAR homes. |
| **Target Market** | Residential new homes market, with initial focus on mid-market homes. |
| **Program Duration** | June 2011 – May 2014 |
| **Program Description** | New construction covers the building of new energy-efficient homes, including the new home's envelope (outer walls, windows, doors, skylights, roof and insulation), HVAC system, ductwork, lighting, and appliances. The program targets builders with a package of training, technical, and marketing assistance and incentives for construction of ENERGY STAR homes. The program would also provide supplemental incentives for savings measures not otherwise included in the builders' design or construction process (e.g. the ENERGY STAR Advanced Lighting Package, duct sealing, air sealing, insulation, and ENERGY STAR certified appliances). This program is designed to be closely coordinated with the Ameren Illinois' Residential Lighting, Appliance Recycling, and Energy Efficient Products program.<br><br>Recent activity within the Illinois building code sector has raised the bar for building requirements. IECC 2009 is the new building code, which is 15% more stringent than IECC 2006. ENERGY STAR version 3.0 attempts to increase incremental energy savings above and beyond this new code to provide consumers with the most energy efficient options. |
| **Eligible Measures & Incentive Strategy** | There will be one incentive level for central air and natural gas heat. The estimated incentive level to start the new 3-year implementation plan is: |

**Energy Star New Home**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| Energy Star New Home | $ 630 | 2100 | 0.875 | 144 | 21,000,000 | 14,000,000 | 29 | $ 4,079 |

| | |
|---|---|
| **Implementation Strategy** | Ameren Illinois' program provides incentives to builders to defray the incremental costs of reaching ENERGY STAR levels. More successful programs have focused on providing marketing support and incentives that cover the cost of the Home Energy Ratings ("HERS") rating required to establish that the home meets ENERGY STAR standards.<br><br>Ameren Illinois will engage contractor(s) to implement the program. Key aspects of contractor's proposed implementation plans should include the following components:<br>• **Build the HERS provider infrastructure.** The key to all successful ENERGY STAR Homes programs is an active HERS rating provider community. RESNET (the organization that certifies HERS raters) lists about 7 certified raters in Illinois, suggesting that there is at least the start of the required infrastructure already in place.<br>• **Recruit builders.** This step requires one-on-one meetings with builders to establish the program's value-proposition. The proposition in many markets has been that by building to ENERGY STAR levels, builders can create market differentiation. Using large incentives as the value proposition can be inconsistent with a goal of transforming builder practices. Over a dozen builders in the Company's services areas are listed as ENERGY STAR builders, although they report relatively few homes having actually been built. Outreach to, and engagement of, these builders will be an essential part of the recruiting strategy.<br>• **Provide builder training.** Provide training on ENERGY STAR requirements, compliance paths, incentive structures, and the marketing strategy. Monies will be allocated to allow sufficient outreach and builder visits to promote the program and monitor progress.<br>• **Recruit trade allies.** Electrical and HVAC contractors are key to the success of the program, as their ability to perform greatly influences the success of the program. Electrical contractors may need training in the lighting design using CFL fixtures. HVAC contractors will likely need training in proper sizing, charging, and duct sealing.<br>• **Establish incentive structure.** Ameren Illinois currently pays builders a nominal incentive to cover the cost of the HERS rating. Ameren Illinois will continue to explore incentive mechanisms that encourage large numbers of ENERGY STAR homes. Several successful program models have been based on using a competitive bid process to award program incentives. The bid involves both a commitment to a number of homes as well as a bid of cooperative advertising dollars.<br>• **Training.** Depending on the strength of the local housing market and the extent to which realtors are involved in new home sales, the program may offer lender, realtor, and appraiser training courses.<br>The new ENERGY STAR v 3.0 contains two paths to qualify projects: Performance Path and a Prescriptive Path. It will be the contractor's responsibility to review and approve ENERGY STAR new homes. |

**Implementation Strategy Cont'd.**

**Prescriptive Path**

Build homes to the ENERGY STAR Reference Design Specifications.

Complete all inspection checklists.

**Performance Path**

Model home with ENERGY STAR Reference Design specifications using approved software and generate HERS Index.

Specifications may be adjusted but must ensure HERS score is less than or equal to ENERGY STAR v 3.0 target.

Build home with selected specifications

Complete inspection checklists

**Marketing Strategy**

The program will continue to educate homebuilders, consumers, and trade allies regarding the energy-saving benefits and value of ENERGY STAR qualified homes. Marketing efforts will focus on: homebuilder recruitment, continued training and support, coordination with state and federal incentive programs, public relations, and the implementation of multi-media advertising campaigns geared toward homebuilders, consumers, and trade allies. The program will also begin to explore the development of leads through building permit lists in cities and towns throughout the Ameren Illinois service territories. Hosting, sponsoring, and attending various trade show exhibitions and homebuilder conferences remain crucial to marketing the program.

**Estimated Participation**

**Number of Homes**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| Energy Star New Home | 70 | 78 | 84 | 231 |

**Estimated Budget**

**Estimated Electric Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $80,553 | $92,267 | $102,898 | **$275,719** |
| Admin | $63,307 | $71,292 | $78,435 | **$213,034** |
| **Total** | **$143,860** | **$163,559** | **$181,333** | **$488,753** |

**Estimated Gas Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $35,622 | $40,802 | $45,503 | **$121,926** |
| Admin | $28,444 | $32,036 | $35,250 | **$95,730** |
| **Total** | **$64,065** | **$72,838** | **$80,753** | **$217,656** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 341 | 380 | 411 | **1,132** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 273 | 304 | 329 | **906** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 16,038 | 17,835 | 19,311 | **132,000** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net Therms** | 12,831 | 14,268 | 15,449 | **42,548** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| Energy Star New Homes | **1.02** |

| PROGRAM | Residential 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 | June 2011 – May 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 Business 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. |
| 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. These incentive values will be verified and altered as needed by the implementation contractor prior to program launch. |

**Multifamily**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| Wall Insulation | $ 79 | 450 | 0.09 | 68 | 4,499,226 | 6,626,461 | 20 | $ 350 |
| Ceiling Insulation | $ 33 | 248 | 0 | 201 | 2,475,000 | 20,091,500 | 20 | $ 1,500 |
| Duct Insulation | $ 64 | 278 | 0.04 | 59 | 2,777,644 | 4,565,960 | 20 | $ 220 |
| Duct sealing | $ 21 | 305 | 0.08 | 41 | 3,054,704 | 3,967,165 | 20 | $ 73 |
| ECM Blower | $ 198 | 931 | 0.23 | - | 9,313,715 | - | 480 | $ 480 |
| AC | $ 157 | 506 | 0.45 | - | 5,062,668 | - | 12 | $ 381 |
| Furnace | $ 441 | 524 | 0.26 | 174 | 5,241,426 | 19,202,308 | 15 | $ 1,070 |
| setback Thermostat | $ 34 | 493 | - | 71 | 4,930,351 | 6,901,919 | 9 | $ 73 |
| CFL | $ 4 | 56 | 0.00 | - | 559,135 | - | 9 | $ 6 |
| Pipe Wrap | $ 4 | 96 | 0.03 | 11 | 2,570,000 | 1,074,219 | 6 | $ 4 |
| Low Flow Showerheads | $ 15 | 424 | 0.05 | 22 | 4,240,000 | 2,148,438 | 12 | $ 15 |
| Low Flow Faucet Aerators | $ 3 | 258 | 0.03 | 7 | 4,042,436 | 309,992 | 12 | $ 3 |
| Smart Strip | $ 12 | 184 | 0.01 | - | 1,840,000 | - | 5 | $ 40 |
| Water Heater, Tank Blanket-Insulation | $ 6 | 180 | 0.02 | - | 1,800,000 | | 10 | $ 18 |
| Water Heater, Thermostat Setback | $ 7 | 176 | 0.02 | 11 | 1,630,000 | 1,074,219 | 9 | $ 16 |
| Energy Star Room AC | $ 35 | 101 | 0.09 | - | 1,010,000 | - | 12 | $ 86 |
| PTAC/PTHP | $ 52 | 259 | 0.15 | - | 2,586,986 | - | 15 | $ 162 |
| HVAC Maintenance and Tune-up | $ 48 | 128 | 0.17 | 24 | 1,276,302 | 2,339,664 | 10 | $ 129 |

| | |
|---|---|
| **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 provides for broader measure eligibility, the incentive structure focuses 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 request brief energy surveys of their properties that would be combined with some direct installation of measures. In addition, 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 Illinois' 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 Illinois. |

**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 and participation in local meetings of multifamily property managers. The program would be advertised via Ameren Illinois' web site. Marketing collateral would be limited to a basic program brochure.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| Wall Insulation | 316 | 493 | 624 | **1,433** |
| Ceiling Insulation | 104 | 140 | 177 | **421** |
| Duct Insulation | 247 | 274 | 290 | **811** |
| Duct sealing | 669 | 753 | 763 | **2,184** |
| ECM Blower | 552 | 629 | 685 | **1,865** |
| AC | 418 | 354 | 316 | **1,088** |
| Furnace | 166 | 197 | 225 | **587** |
| setback Thermostat | 383 | 443 | 454 | **1,280** |
| CFL | 21,854 | 19,462 | 17,786 | **59,102** |
| Pipe Wrap | 603 | 950 | 1,214 | **2,767** |
| Low Flow Showerheads | 5,128 | 5,878 | 6,057 | **17,063** |
| Low Flow Faucet Aerators | 9,323 | 10,686 | 11,013 | **31,023** |
| Smart Strip | 157 | 166 | 168 | **491** |
| Water Heater, Tank Blanket-Insulation | 2,902 | 3,277 | 3,326 | **9,504** |
| Water Heater, Thermostat Setback | 3,980 | 4,337 | 4,201 | **12,518** |
| Energy Star Room AC | 71 | 77 | 32 | **180** |
| PTAC/PTHP | 334 | 354 | 454 | **1,142** |
| HVAC Maintenance and Tune-up | 1,242 | 1,289 | 1,269 | **3,800** |

**Estimated Budget**

**Estimated Electric Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $419,578 | $463,791 | $497,106 | **$1,380,474** |
| Admin | $648,033 | $708,994 | $753,695 | **$2,110,721** |
| **Total** | **$1,067,611** | **$1,172,784** | **$1,250,800** | **$3,491,196** |

**Estimated Gas Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $280,298 | $347,006 | $401,221 | **$1,028,525** |
| Admin | $412,382 | $503,352 | $575,473 | **$1,491,208** |
| **Total** | **$692,680** | **$850,359** | **$976,695** | **$2,519,733** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 6,093 | 6,522 | 6,606 | **19,221** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 4,874 | 5,217 | 5,285 | **15,377** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 308,895 | 363,539 | 391,347 | **132,000** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net Therms** | 247,116 | 290,831 | 313,078 | **851,025** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Multifamily | **1.94** |

| PROGRAM | Residential Behavior Modification |
|---|---|
| **Objective** | The program provides residential customers with a Home Energy Report designed to both motivate and educate recipients to improve the energy efficiency of their homes. |
| **Target Market** | Ameren Illinois' contractor will perform historical energy usage, demographic, and geographic research, in conjunction with Ameren Illinois, to identify the regions of Ameren Illinois' territory best suited to deploy the pilot program. Zip codes, city, and county boundaries will be considered so as to optimize data coverage and ensure speedy deployment. |
| **Program Duration** | June 2011 – May 2014 |
| **Program Description** | The Home Energy Report relies on providing customers with a comparison of their energy usage to their "neighbors." A neighbor is not necessarily a next door neighbor but rather someone who has similar characteristics in terms of size of home, distance from the home, and heating fuel.<br><br>Home Energy Reports will be mailed to targeted residential customers on an average bi-monthly frequency (6 reports every 12 months), with exact frequencies for each customer mutually-agreed-to, for the duration of the program. The energy and program participation data for this implementation will be provided on an ongoing basis by Ameren Illinois and will be combined with third party data to build comprehensive profiles of each participating customer. In addition to the Home Energy Reports, a customer service interface will give customer service representatives online access to the full history of the Home Energy Reports delivered to customers. Last, the Energy Insider customer-facing website will provide customers online access to their Home Energy Report, online benchmarking, audit-like functionality ("best tips for me" and "neighbor challenge"), and access to additional energy efficiency information beyond that presented on the mailed report. |
| **Eligible Measures & Incentive Strategy** | The program focuses on energy consumption behavior changes that result in reduced electricity and natural gas consumption. As such, the overall metric is reduced monthly/annual energy consumption. There are no specific energy efficiency measures associated with the program or corresponding incentives. |

**Behavior Modification**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| Home Energy Report | $ - | 324 | 0.0958048 | 10 | 2,088,000 | 1,171,875 | 1 | $ - |

**Implementation Strategy**

Ameren Illinois will utilize a third party contractor to implement the program. Key implementation steps and process include but are not limited to:

- Home Energy Reports will be mailed to targeted residential customers on an average bi-monthly frequency (6 reports every 12 months), with exact frequencies for each customer mutually-agreed-to, for the duration of the program.
- The energy and program participation data for this implementation will be provided on an ongoing basis by Ameren Illinois and will be combined with third party data to build comprehensive profiles of each participating customer.
- In addition to the Home Energy Reports, a customer service interface will give customer service representatives online access to the full history of the Home Energy Reports delivered to customers.
- Ameren Illinois' website will provide customers online access to their Home Energy Report, online benchmarking and audit-like functionality ("best tips for me" and "neighbor challenge"), and access to additional energy efficiency information beyond that presented on the mailed report.

**Marketing Strategy**

Use energy, housing, and demographic data and available past program participation data to design a multi-dimensional segmentation plan of potential customers based on:

- Energy consumption patterns (e.g. normalized high seasonal peak, high base load, etc.)
- Housing data (e.g. age of house, size of house, value of home, type of construction, presence of a pool, presence of a garage)
- Past program participation & rebate redemption (e.g. ENERGY STAR and other rebates; rate programs, etc.) if available
- Demographic data (e.g. renter vs. homeowner, presence of children in the household, indicators of interest in environmental issues, age of customer, duration of residence, socioeconomic/income levels, as available)

Identify high-potential prospects for program marketing by profiling historical participants and available historical marketing campaign results.

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Home Energy Report | 67,000 | 67,000 | 67,000 | **201,000** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $0 | $0 | $0 | **$0** |
| Admin | $827,791 | $852,625 | $878,203 | **$2,558,619** |
| **Total** | **$827,791** | **$852,625** | **$878,203** | **$2,558,619** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $0 | $0 | $0 | **$0** |
| Admin | $253,434 | $261,038 | $268,869 | **$783,341** |
| **Total** | **$253,434** | **$261,038** | **$268,869** | **$783,341** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 21,705 | 21,705 | 21,705 | **65,115** |
| **Net-to-Gross** | 1 | 1 | 1 | **1** |
| **Net MWH** | 21,705 | 21,705 | 21,705 | **65,115** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 664,517 | 664,517 | 664,517 | **132,000** |
| **Net-to-Gross** | 1 | 1 | 1 | **1** |
| **Net Therms** | 664,517 | 664,517 | 664,517 | **1,993,551** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| Behavior Modification | **1.71** |

| PROGRAM | Residential Moderate Income |
|---|---|
| Objective | Focus Moderate Income funding on energy efficiency improvements in moderate income households rather than on more traditional bill paying assistance activities. By investing in energy efficiency improvements, these target customers will experience lower energy bills for years to come. Similar to the historical bill paying assistance, these funds would be targeted to customers that are financially constrained but not eligible for traditional low income weatherization programs targeted to customers at or below 200% of the poverty level. |
| Target Market | The Moderate Income Program targets homeowners greater than 200% but less than 300% of the poverty level for the household size. |
| Program Duration | June 2011 – May 2014 |
| Program Description | The Moderate Income program seeks to further subsidize the implementation of energy efficiency improvements in moderate income households that are struggling financially and unable to either pay for or borrow the funds to pay for the efficiency upgrades. These homeowners are above the low income weatherization income guidelines and are not eligible for free services but are still in need of assistance. The Moderate Income program seeks to leverage the benefits and incentives of Ameren Illinois' efficiency programs with Moderate Income funding targeted to lower moderate income homeowners and incorporate a financing component for the customer portion of the financial transaction. As a result, eligible moderate income homeowners would be able to afford long term energy efficiency improvements but still be participating in the investment through some sort of financing mechanism. |

**Eligible Measures & Incentive Strategy**

The working assumptions are as follows:
Moderate Income funding – up to $5,000 per eligible household.
The determination of each contributing source would follow these proposed guiding principles:

- Act On Energy efficiency incentives would be subtracted first from the total cost of the project;
- A customer contribution through a specified financing mechanism - $500 or 10% of the total project cost would be subtracted next; and,
- Moderate Income funding would contribute the balance of the remaining project cost up to a maximum of $5,000.

For example, assume an eligible household needed attic insulation and air sealing as well as a new gas furnace, and the total cost of the project was $6,000. If Act On Energy incentives came to a total of $700, the customer could contribute $600 (the greater of 10% of the total project cost or $500), and the Moderate Income funding could cover the difference of $4,700 ($6,000 minus $1,300).

If, on the other hand, the project for the same eligible household was a new gas furnace with a total installed cost of $3,000, then Act On Energy would pay $200, the customer could fund $500, and the Moderate Income fund could cover the difference, or $2,300.

| Moderate Income | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
| Wall Insulation | $ 220 | 358 | 0.06 | 54 | 3,582,248 | 5,237,058 | 20 | $ 357 |
| Duct Insulation | $ 135 | 278 | 0.04 | 42 | 2,777,644 | 4,061,146 | 20 | $ 220 |
| Ceiling Insulation | $ 927 | 248 | 0 | 201 | 2,475,000 | 20,091,500 | 20 | 1,500 |
| Duct location | $ 515 | 706 | 0.15 | 91 | 7,057,806 | 8,879,646 | 20 | $ 1,650 |
| Duct sealing | $ 36 | 292 | 0.08 | 39 | 2,921,549 | 3,796,393 | 18 | $ 73 |
| ECM Blower | $ 275 | 931 | 0.23 | - | 9,313,715 | - | 15 | $ 480 |
| AC | $ 227 | 505 | 0.45 | - | 5,052,280 | - | 12 | $ 367 |
| Furnace | $ 737 | 524 | 0.26 | 166 | 5,241,426 | 18,315,176 | 15 | $ 1,193 |
| Air Sealing | $ 146 | 620 | 0.16 | 96 | 6,198,244 | 9,320,547 | 13 | $ 264 |
| setback Thermostat | $ 53 | 493 | - | 71 | 4,930,351 | 6,901,919 | 9 | $ 73 |
| CFL | $ 10 | 53 | 0.00 | - | 528,773 | - | 9 | $ 10 |
| Water Heater | $ 229 | 980 | 0.17 | 17 | 9,795,000 | 2,246,094 | 15 | $ 376 |
| Pipe Wrap | $ 10 | 257 | 0.03 | 58 | 2,570,000 | 1,074,219 | 6 | $ 10 |
| Low Flow Showerheads | $ 43 | 424 | 0.05 | 22 | 4,240,000 | 2,148,438 | 12 | $ 42 |
| Low Flow Faucet Aerators | $ 14 | 136 | 0.02 | 7 | 1,360,000 | 683,594 | 12 | $ 14 |
| Smart Strip | $ 41 | 184 | 0.01 | - | 1,840,000 | - | 5 | $ 40 |
| Radiant Barrier | $ 269 | 171 | 0.05 | 14 | 1,710,000 | 1,367,188 | 30 | $ 436 |
| Geothermal DeSuperheater | $ 98 | 1,540 | 0.17 | - | 15,400,000 | - | 10 | $ 239 |
| Water Heater, Tank Blanket-Insulatior | $ 77 | 180 | 0.02 | - | 1,800,000 | - | 10 | $ 51 |
| Water Heater, Thermostat Setback | $ 8 | 163 | 0.02 | 11 | 1,630,000 | 1,074,219 | 4 | $ 8 |

| | |
|---|---|
| **Implementation Strategy** | Energy Assistance Foundation ("EAF") Role:<br>• Conduct outreach to prospective eligible customers in the agreed upon targeted geographic areas in the first program year based upon agreed upon participation goals for each geographic area;<br>• Establish an income documentation protocol and screen prospective participant homeowners using the protocol to establish income eligibility for the Moderate Income program;<br>• Prescreen potential energy efficiency projects in eligible homes and provide a description of the project to the Act On Energy residential administrator;<br>• Refer eligible screened projects to the Act On Energy residential administrator; and,<br>• Reimburse the Act On Energy residential administrator on a monthly basis for project costs incurred according to an agreed upon procedure.<br><br>Act On Energy Residential Administrator Role:<br>• Schedule HEP audit for each prescreened Moderate Income customer in a timely fashion;<br>• Conduct the HEP audit, waiving the $25 fee, and install efficient lighting and high efficiency water measures at the time of the audit;<br>• Produce a report for the customer indicating eligible energy efficiency measures;<br>• Arrange for participating contractors to provide pricing for the measures;<br>• Present a final proposal to the customer incorporating contractor pricing and a breakdown of the various funding components of the project;<br>• Coordinate contractor work;<br>• Conduct a final quality assurance inspection;<br>• Pay the participating contractors;<br>• Invoice EAF and Ameren Illinois for the incentives paid, and,<br>• Develop a monthly program status report that is created with input from both Ameren Illinois and EAF and then distributed on a monthly basis to both Ameren Illinois and EAF.<br><br>General management and oversight of the Program Coordinator will be assumed by the Act On Energy residential programs administrator. |

**Marketing Strategy**

Marketing strategy is integrated with the Home Energy Performance program. The marketing strategy will focus on targeted market segments of customers who meet the moderate income guidelines. For those customers that have applied to receive EAF funding, an informational session will be held to discuss qualifying efficiency measures, projects, and improvements. Further down the road, a more targeted marketing approach may be used sending out mailers or holding general community sessions to reach a broader customer base. Next, for the Home Energy Performance component of the program, customers will be contacted directly by the contractor.

A unique marketing opportunity that may be considered to initiate contact and broaden the network of trade allies associated with the Home Energy Performance component is that Ameren Illinois will consult various community organizations to communicate the benefits of the program within their respective social circles. Instructing these community leaders on how the program works and the benefits of energy efficiency will provide a trusted network of Ameren Illinois spokespersons that the communities can identify with. These "social sales-reps" will have marketing brochures identifying potential efficiency improvements, benefits of participating in the program, a marketing survey to fill out, and rebates for CFLs from the online store, contingent upon the completion of the short survey. These "social sales-reps" will promote the program in their community meetings, seminars, weekly sports leagues, etc. to reach a broad audience in a concentrated environment.

**Estimated Participation**

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| Wall Insulation | 6 | 6 | 6 | **18** |
| Duct Insulation | 18 | 19 | 19 | **57** |
| Ceiling Insulation | 114 | 118 | 121 | **353** |
| Duct location | 2 | 2 | 2 | **5** |
| Duct sealing | 24 | 25 | 26 | **76** |
| ECM Blower | 22 | 22 | 23 | **67** |
| AC | 10 | 10 | 10 | **30** |
| Furnace | 14 | 14 | 15 | **43** |
| Air Sealing | 24 | 25 | 26 | **76** |
| setback Thermostat | 49 | 50 | 52 | **151** |
| CFL | 10,258 | 10,566 | 10,883 | **31707** |
| Water Heater | 18 | 19 | 20 | **57** |
| Pipe Wrap | 18 | 19 | 20 | **57** |
| Low Flow Showerheads | 2,301 | 2,370 | 2,441 | **7112** |
| Low Flow Faucet Aerators | 4,602 | 4,740 | 4,882 | **14223** |
| Smart Strip | 445 | 459 | 473 | **1377** |
| Radiant Barrier | 6 | 6 | 7 | **19** |
| Geothermal DeSuperheater | 5 | 6 | 6 | **17** |
| Water Heater, Tank Blanket-Insul | 135 | 139 | 143 | **417** |
| Water Heater, Thermostat Setbac | 230 | 237 | 244 | **711** |

**Estimated Budget**

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $259,943 | $273,591 | $287,983 | **$821,517** |
| Admin | $305,880 | $316,489 | $328,438 | **$950,807** |
| **Total** | **$565,823** | **$590,080** | **$616,421** | **$1,772,324** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $181,561 | $192,618 | $204,349 | **$578,528** |
| Admin | $188,449 | $196,226 | $205,301 | **$589,975** |
| **Total** | **$370,010** | **$388,844** | **$409,649** | **$1,168,503** |

**Savings Targets**

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 2,279 | 2,334 | 2,369 | **6,983** |
| **Net-to-Gross** | 0.76 | 0.76 | 0.76 | **0.76** |
| **Net MWH** | 1,732 | 1,774 | 1,800 | **5,307** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 85,329 | 87,889 | 90,525 | **132,000** |
| **Net-to-Gross** | 0.76 | 0.76 | 0.76 | **0.8** |
| **Net Therms** | 64,850 | 66,795 | 68,799 | **200,445** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| RES Moderate Income | **1.36** |

## 5.4 Business Portfolio of Programs

Like the Residential portfolio of programs, the Ameren Illinois Business portfolio of programs offers a complementary set of energy management options to commercial and industrial customers. Many customers may initially enter the program through the prescriptive program elements, which focus primarily on lighting and motors retrofits. These simpler measures will also provide a conduit for Ameren Illinois to build relationships with Business customers. As a business relationship matures, Ameren Illinois will use the Business portfolio of programs to promote more comprehensive commercial and industrial energy management options.

Ameren Illinois will offer a range of options through the customized efficiency track that can reach businesses with a greater variety of energy using processes that typically have larger total usage. As Ameren Illinois continues to build relationships with medium and large customers, it will develop program elements that package several custom measures into a suite that targets a specific sector.

The programs will also foster the development of a local energy efficiency industry in the Ameren Illinois territory. By providing increased marketing, technical assistance, and actual incentives for participation, Ameren Illinois will help to drive more customers toward high-efficiency buildings. Various program elements will target new load sources during initial building design and existing load sources through retrofit and retro-commissioning projects. The programs will support the nascent retro-commissioning and “green building” industries in the utilities’ territory, transforming the market over time and reducing the cost of increased efficiency by building local capacity for high-performance building design and operation. A description of the various business programs follows.

| PROGRAM | Business Standard Incentive Program |
|---|---|
| Objective | The Business Standard Incentive 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 default savings values associated with their energy performance. |
| Target Market | Nonresidential customers including commercial, industrial, and targeted institutional. |
| Program Duration | June 2011 – May 2014 |
| Program Description | The Business Standard Program will incentivize customers to purchase energy efficient products. Measures included within this program will have predetermined 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 Illinois via contractors, customers, or through the Act On Energy 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 (air compressors, VFDs, etc.). Trade allies including contractors, retailers, and distributors will be the main sales force promoting the program and educating customers.<br><br>There will be a separate marketing effort applied to the motors market to attempt to transform a historically inefficient marketplace. According to Ameren Illinois' 2010 DSM potential study, the long-term energy savings associated with the installation of National Electrical Manufacturers Association ("NEMA") Premium motors for Ameren Illinois' 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, and the general massive scale of the potential market. At its core, this program is a market transformation program 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. It is also designed to create long-term opportunities to replace inefficient motors with NEMA Premium motors through attrition. |
| Eligible Measures & Incentive Strategy | |

**Business Standard**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| AC | $ 12,139 | 19,230 | 25 | - | 192,304,831 | - | 15 | $ 29,462 |
| Heating | $ 18,776 | 1,910 | 0 | 6,206 | 19,103,557 | 604,869,317 | 15 | $ 38,820 |
| CHW | $ 57 | 83,709 | 6 | 409 | 837,092,858 | 39,882,876 | 5 | $ 281 |
| Heat Pumps | $ 14,541 | 38,383 | 24 | - | 383,828,869 | - | 15 | $ 35,294 |
| Energy Management | $ 901 | 55,288 | (11) | 4,483 | 552,882,615 | 436,987,650 | 9 | $ 4,320 |
| High Performance T8 | $ 23 | 157 | 0 | - | 1,573,940 | - | 12 | $ 57 |
| Outdoor Lighting | $ 74 | 538 | 0 | - | 5,376,000 | - | 12 | $ 190 |
| Misc Lighting | $ 8 | 313 | 0 | - | 3,132,599 | - | 6 | $ 30 |
| Water Heaters | $ 516 | 6,048 | 6,048 | 128 | 60,479,230 | 12,467,055 | 15 | $ 1,482 |
| Commercial Refrigeration | $ 100 | 898 | 898 | - | 8,976,318 | - | 7 | $ 252 |
| Cooking Equipment | $ 2,553 | 1,120 | 1,120 | 1,728 | 11,196,738 | 168,388,131 | 12 | $ 6,197 |
| Misc Water Heating | $ 21 | 2,713 | 2,713 | 116 | 27,130,229 | 11,270,302 | 5 | $ 63 |
| Misc | $ 502 | 3,260 | 3,260 | 49 | 32,603,083 | 4,814,748 | 5 | $ 1,323 |
| Motors | $ 783 | 3,303 | 1 | 0 | 33,033,315 | - | 15 | $ 760 |

| | |
|---|---|
| **Implementation Strategy** | A third party contractor will be responsible for program implementation and management. Primary responsibilities include final program design, measure lists, implementation plan development, and expanding 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 must be provided by the contractor.<br><br>As customers submit applications for incentives, program staff will review the applications and pre-approve projects if they meet the necessary criteria developed by the contractor and Ameren Illinois. An individual project implementation timeline will be utilized to encourage prompt installation and maintain accurate tracking of program savings goals and relative budgets.<br><br>For the motors marketing plan, Ameren Illinois and its contractor will work with the motor dealer/distributor in program design. Not only are they potential marketing and educational allies, but they are key influences in customer decisions.<br>Educating the end user is the most effective way to increase sales and stocking habits of dealers and help ensure persistence. 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 Incentives |

| | |
|---|---|
| **Marketing Strategy** | Marketing efforts will focus on trade allies and program partners. Key pillars of the marketing strategy for the Business Standard Incentive Program include:<br>• **Education.** The contractor will play an important role in training and educating the trade ally sales staff. The contractor will assist trade allies in identification of measures qualifying for prescriptive incentives; identify the different application options, and identify how to effectively sell the program to customers.<br>• **Marketing Materials.** Materials will be provided to the customers to further enhance program awareness and increase market penetration.<br>• **Direct Mail.** This marketing vehicle will require a targeted approach, identifying potential efficient installs based on business operating characteristics and building types.<br>• **Associations.** A unique opportunity exists in various trade organizations. Businesses rely on these organizations to represent that industry's best interests in lobbying, growth, and identification of business opportunities. Ameren Illinois will coordinate with specific associations to highlight program offerings suitable for their respective industry.<br>• **Highlight successfully completed projects.** Ameren Illinois 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.<br>• **Market Segmentation.** To more effectively penetrate the Ameren Illinois' markets, a targeted marketing approach can 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.<br>Motors will require a special segmentation approach which will leverage Ameren Illinois' service representatives to work closely with customers to identify motor and motor system needs and inefficiencies. Field Representatives are also crucial to this kind of effort to regularly visit motor dealers for relationship building, training, and education purposes (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 Representative 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 program years 2-3 has the following elements: |

**Marketing Strategy Cont'd.**

- 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.
- As Ameren Illinois develops 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.
- Work with U.S. DOE on heavy industry sectors.

Develop sustainability and persistence within the C&I sector through Best Practices and behavior changes in purchasing and specification.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| AC | 20 | 26 | 31 | **78** |
| Heating | 120 | 139 | 154 | **413** |
| CHW | 19 | 15 | 12 | **45** |
| Heat Pumps | 24 | 14 | 7 | **46** |
| Energy Management | 191 | 202 | 204 | **596** |
| High Performance T8 | 129,580 | 113,175 | 112,293 | **355,048** |
| Outdoor Lighting | 56 | 39 | 65 | **161** |
| Misc Lighting | 61,160 | 42,553 | 33,345 | **137,057** |
| Water Heaters | 510 | 491 | 454 | **1,455** |
| Commercial Refrigeration | 427 | 443 | 420 | **1,290** |
| Cooking Equipment | 9 | 9 | 8 | **25** |
| Misc Water Heating | 530 | 528 | 504 | **1,562** |
| Misc | 817 | 890 | 746 | **2,453** |
| Motors | 1,844 | 2,132 | 2,418 | **6,393** |

**Estimated Budget**

**Estimated Electric Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $6,193,232 | $6,084,968 | $6,270,894 | **$18,549,094** |
| Admin | $3,618,481 | $3,571,140 | $3,664,475 | **$10,854,096** |
| **Total** | **$9,811,713** | **$9,656,108** | **$9,935,369** | **$29,403,190** |

**Estimated Gas Budget**

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| Incentive | $2,473,092 | $2,816,727 | $3,107,422 | **$8,397,242** |
| Admin | $1,341,565 | $1,594,579 | $1,813,085 | **$4,749,230** |
| **Total** | **$3,814,657** | **$4,411,307** | **$4,920,507** | **$13,146,471** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 67,346 | 58,069 | 54,108 | **179,522** |
| **Net-to-Gross** | 0.71 | 0.7 | 0.69 | **0.7** |
| **Net MWH** | 47,815 | 40,648 | 37,334 | **125,798** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 2,245,774 | 2,562,378 | 2,859,765 | **7,667,916** |
| **Net-to-Gross** | 0.51 | 0.51 | 0.5 | **0.51** |
| **Net Therms** | 1,145,345 | 1,306,813 | 1,429,883 | **3,882,040** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Standard | **1.69** |

| PROGRAM | Business Custom Incentive Program |
|---|---|
| Objective | The Business Custom Incentive program provides energy efficiency expertise, services, and financial incentives to encourage C&I customers to install energy efficient equipment and complete process system improvements that reside outside prescriptive lighting, HVAC, motors, refrigeration, and some process applications. Some Custom Incentive 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 | June 2011 – May 2014 |
| Program Description | The Custom Incentive Program applies to products in lighting, HVAC, refrigeration, motors, and some process upgrades that do not fall into the Standard Incentive program. These projects normally are complex and unique, requiring separate incentive applications and calculations of estimated energy savings. |

**Eligible Measures & Incentive Strategy**

Financial incentives will be provided to offset the higher costs associated with installation of new, higher efficient equipment, building system, or process upgrades. Cost-effective measures falling outside of the scope of standard lighting, refrigeration, HVAC, and motors programs will be included in the Custom Incentive Program. Incentive levels will be calculated based off of energy savings estimates for each project. Incentives will be subject to modification to balance the program's financial requirements and savings targets.

Project funding will be capped at a predetermined amount per project, per program year, per facility. Incentive levels will vary between different technologies and fuel types as needed to adhere to budgetary limits and achieve energy savings goals.
Alternatively, for large projects yielding large kWh savings, a competitive project incentive will be offered. This program area will have no payback criteria and will have a predetermined incentive cap (not to exceed 50% of project cost). The application process will mimic the process flow listed above, with the major difference being the incentive amount and payback criteria.

The measures below represent typical Custom Incentive program measures and are accompanied by estimated energy savings. The incentive levels below reflect a $0.05/kWh incentive for lighting and a $0.07/kWh for all other electric measures. For applicable natural gas measures, $0.60/therm was used based off of market research and discussions with implementation teams. Incentives have also been capped at 50% of project cost, although this value is dynamic and will change to meet market demand. These incentive levels are based off of Ameren Illinois' best projections but will likely change based on market conditions and implementation experience.

| Business Custom | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
| AC | $ 2,179 | 19,230 | 24.74 | - | 192,304,831 | - | 15 | $ 29,462.44 |
| Heating | $ 4,915 | - | - | 6,830 | - | 665,681,873 | 16 | $ 40,234.85 |
| Optimization/Compressed Air | $ 194 | 1,356 | 0.25 | - | 12,707,987 | - | 6 | $ 121.24 |
| Heat Pumps | $ 1,033 | 9,115 | 5.16 | - | 91,149,142 | - | 15 | $ 6,086.46 |
| Energy Management | $ 417 | 3,579 | 0.19 | 16 | 35,785,977 | - | 14 | $ 999.58 |
| Steam Upgrades/Tune-up | $ 2,896 | 25,557 | 9.36 | 0 | 255,572,875 | - | 8 | $ 11,246.17 |
| Building Shell | $ 1,658 | 14,633 | 2.76 | - | 146,332,127 | - | 20 | $ 6,765.97 |
| Misc Lighting | $ 110 | 1,343 | 0.34 | - | 13,425,885 | - | 6 | $ 302.74 |
| Commercial Refrigeration | $ 111 | 982 | 0.01 | - | 9,821,719 | - | 15 | $ 231.98 |
| Misc Water Heating | $ 5 | - | - | 7 | - | 721,705 | 20 | $ 5.99 |
| Misc | $ 282 | 1,783 | 0.50 | 384 | 4,998,757 | 38,378,906 | 15 | $ 250.00 |
| Motors | $ 1,791 | 15,803 | 1.56 | 0 | 158,025,660 | - | 15 | $ 1,974.70 |

| | |
|---|---|
| **Implementation Strategy** | The Custom Incentive program will be implemented by the implementation contractor. The implementation contractor will be responsible for engineering review and QA/QC. The implementation and installation of efficiency measures is the responsibility of the customer. The customer will submit an application outlining their potential efficiency upgrades. The implementation contractor 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** – does the facility have the necessary requirements to be included in the program (appropriate rate class, located in Ameren Illinois' service territory, equipment must be new and installed at a non-residential location)?<br>• **Project eligibility** – project must be installing new, premium efficient equipment or incorporating energy efficient designs, and Ameren Illinois must approve any product purchase or installation before the customer can receive an incentive.<br>• **Application submittal** – the customer will submit the project application to Ameren Illinois for analytic review and pre-installation approval.<br>• **Customer implements project** – the customer has the primary responsibility to install the pre-approved measures and improvements.<br>• **Post installation documents** – the 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. Ameren Illinois approval will be required for any incentive application exceeding a preset limit defined by Ameren Illinois and the implementation contractor. |

**Marketing Strategy**

Communication and education will continue to be essential components in this program's marketing strategy. Primary marketing strategies will include:

- **Highlight successfully completed projects**. Ameren Illinois will selectively choose projects to display the process and benefits of the Custom Incentive 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 Illinois will continue to utilize the growing trade ally network as salespersons for the program. Proper training must be given to these program partners to ensure that any business development activities are conducted to achieve program goals.
- **Market Segmentation**. To more effectively penetrate Ameren Illinois' markets, a targeted marketing approach can 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.

**Estimated Participation**

**Installations**

| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
|---|---|---|---|---|
| AC | 15 | 19 | 23 | **58** |
| Heating | 27 | 32 | 36 | **96** |
| Optimization/Compressed | 5,046 | 5,191 | 5,100 | **15,337** |
| Heat Pumps | 10 | 6 | 6 | **22** |
| Energy Management | 1,307 | 1,318 | 1,188 | **3,813** |
| Steam Upgrades/Tune-up | 173 | 165 | 157 | **495** |
| Building Shell | 97 | 100 | 91 | **288** |
| Misc Lighting | 32,487 | 23,163 | 18,391 | **74,041** |
| Commercial Refrigeration | 4,141 | 4,102 | 3,630 | **11,872** |
| Misc Water Heating | 112 | 110 | 103 | **325** |
| Misc | 125 | 132 | 126 | **383** |
| Motors | 861 | 827 | 783 | **2,471** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $7,835,441 | $7,934,065 | $7,593,383 | **$23,362,890** |
| Admin | $4,552,362 | $4,608,170 | $4,408,519 | **$13,569,051** |
| **Total** | **$12,387,804** | **$12,542,235** | **$12,001,902** | **$36,931,941** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $145,523 | $173,359 | $199,547 | **$518,429** |
| Admin | $92,559 | $110,351 | $126,966 | **$329,876** |
| **Total** | **$238,082** | **$283,710** | **$326,514** | **$848,305** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 80,608 | 78,971 | 73,404 | **232,983** |
| **Net-to-Gross** | 0.69 | 0.69 | 0.69 | **0.69** |
| **Net MWH** | 55,620 | 54,490 | 50,648 | **160,758** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 273,975 | 305,679 | 323,595 | **903,250** |
| **Net-to-Gross** | 0.69 | 0.69 | 0.69 | **0.69** |
| **Net Therms** | 189,043 | 210,919 | 223,281 | **623,242** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Custom | **2.02** |

| PROGRAM | Business Retro-commissioning |
|---|---|
| **Objective** | This program will deliver energy and demand savings by helping building owners benchmark existing building and/or industrial process facility performance levels, identify building operating system upgrades, 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** | June 2011 – May 2014 |
| **Program Description** | Ameren Illinois will continue to leverage the existing infrastructure of qualified contractors and marketing partners that has delivered measurable energy savings in the 2008-2010 implementation period. 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. |

**Retro-Commissioning**

| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
|---|---|---|---|---|---|---|---|---|
| CHW | $ 58 | 93,858 | 7 | 1,142 | 938,582,510 | 111,351,167 | 5 | $ 281 |
| Optimized Process Cooling | $ 485 | 16,325 | 2 | - | 163,250,000 | - | 15 | $ 1,568 |
| Optimized Process Heating | $ 235 | 7,053 | 1 | - | 70,530,000 | - | 15 | $ 760 |
| Retrocommissioning Lighting | $ 235 | 5,311 | 1 | - | 53,114,130 | - | 5 | $ 761 |
| EMS | $ 27,194 | 313,547 | 21 | 6,473 | 3,135,469,279 | 630,907,609 | 15 | $ 87,257 |
| Compressed Air Optimization | $ 5 | 200 | 0 | - | 2,000,000 | - | 10 | $ 16 |
| Refrigerant Charge Correction | $ 841 | 23,569 | 30 | 2 | 235,689,225 | 44,165 | 10 | $ 2,722 |

| | |
|---|---|
| **Implementation Strategy** | The Program will be implemented by a contractor. The contractor will manage the implementation of the program, rebate fulfillment, oversee survey and implementation of efficiency measures, and provide engineering review for each project. The project qualification process will be guided by the following methodology.<br><br>Interested customers will submit proposals to the contractor for review. After engineering analysis and verification of estimated savings has been completed, the contractor will work with building owners and trade allies to conduct a building survey using a nationally accepted tool (Portfolio Manager or other) to benchmark the building's energy profile. Following the building survey, efficient upgrades will be recommended by the contractor(s) and implemented by the customer. Potential efficiency improvements include but are not limited to: compressed air leak identification, system controls calibration, energy management systems, and hot water improvements. 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 contractor, an incentive check will be delivered to the customer. |
| **Marketing Strategy** | Ameren Illinois 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, the Retro-commissioning program will target nonresidential customers that will benefit from building systems upgrades.<br>• **Web Marketing** – leverage the existing Act On Energy 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.<br>• **Highlight successfully completed projects** – Ameren Illinois 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. |

## Estimated Participation

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| CHW | 5 | 4 | 3 | **13** |
| Optimized Process Cooling | 16 | 16 | 13 | **46** |
| Optimized Process Heating | 71 | 77 | 72 | **219** |
| Retrocommissioning Lighting | 217 | 221 | 221 | **659** |
| EMS | 3 | 3 | 3 | **8** |
| Compressed Air Optimization | 9 | 9 | 8 | **26** |
| Refrigerant Charge Correction | 36 | 35 | 33 | **104** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $176,361 | $178,348 | $178,151 | **$532,859** |
| Admin | $136,261 | $133,077 | $129,230 | **$398,567** |
| **Total** | **$312,621** | **$311,425** | **$307,380** | **$931,426** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $3,976 | $3,841 | $3,889 | **$11,707** |
| Admin | $2,875 | $2,654 | $2,593 | **$8,122** |
| **Total** | **$6,851** | **$6,495** | **$6,482** | **$19,828** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 4,136 | 3,996 | 3,774 | **11,906** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 3,309 | 3,196 | 3,019 | **9,525** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 7,068 | 6,252 | 5,814 | **19,134** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net Therms** | 5,654 | 5,002 | 4,651 | **15,307** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS Retro-commissioning | **3.01** |

| 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 nonresidential 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 Illinois 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 | June 2011 – May 2014 |

| | |
|---|---|
| **Program Description** | The New Construction program is meant to encourage energy efficient building practices within Ameren Illinois' 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 Illinois will attempt to influence the market and promote efficient building design and construction.<br><br>It is vital that Ameren Illinois 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: whole building new construction and major build-outs/renovations to existing facilities.<br><br>**Whole Building New Construction** – companies looking to construct new buildings in Ameren Illinois' 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><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 American Society of Heating, Refrigeration, and Air Conditioning Engineers ("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>Close considerations must be made to recent building code activity within Illinois. As Illinois continues to promote energy efficiency and improve building codes, all new construction projects must comply with ASHRAE 90.1-2007 standards for publicly funded buildings and IECC 2009 for privately funded commercial buildings. All incentives and rebates provided by Ameren Illinois must be towards equipment and practices that exceed these new baseline levels. |

## Eligible Measures & Incentive Strategy

| New Construction | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Measure | Incentive per Unit | Annual kWh Savings | kW Savings | Annual Therm Savings | Annual BTU Electric Savings | Annual BTU Gas Savings | Effective Useful Life | Incremental Cost |
| AC | $ 12,139 | 19,230 | 25 | - | 192,304,831 | - | 15 | $ 29,462 |
| Water Heaters | $ 35 | 184,058 | 37 | 132 | 1,840,580,000 | 12,890,625 | 15 | $ 1,482 |
| Furnace/Boiler | $ 17,568 | - | - | 7,297 | - | 711,247,158 | 17 | $ 42,642 |
| MISC Water Heating | $ 4 | 174 | 0.02 | 79 | 1,736,550 | 7,714,844 | 9 | $ 12 |
| Lighting Controls | $ 785 | 8,179 | 2 | - | 81,789,679 | - | 11 | $ 2,140 |
| Super T8's and T5 lighting | $ 23 | 161 | 0.04 | - | 1,607,479 | - | 12 | $ 56 |
| Building Shell Measures | $ 4,822 | 7,442 | 1 | 4,372 | 74,422,792 | 426,162,419 | 20 | $ 12,352 |
| Energy Management | $ 913 | 21,464 | - | 5,647 | 214,640,835 | 550,400,651 | 9 | $ 3,076 |
| Heat Pumps | $ 9,519 | 28,545 | 17 | - | 285,452,009 | - | 15 | $ 23,103 |
| Commercial Refrigeration | $ 3,246 | 1,994 | 0.23 | - | 19,935,000 | - | 12 | $ 684 |
| CFLs/LEDs | $ 37,585 | 308 | 0.08 | - | 3,082,338 | - | 6 | $ 25 |

## Implementation Strategy

A third party contractor 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 contractor as they are received. The contractor 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 contractor 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.

## Marketing Strategy

The marketing strategy for this program is highly targeted and will leverage industry organizations heavily. Promoting the program and its benefits to organizations such as the United States Green Building Council (“USGBC”), ASHRAE, and other local building organizations will provide valuable marketing access to potential customers in a highly cost-effective manner. Ameren Illinois will also promote this program through other marketing channels including website, direct mailing, and occasional radio or television advertisements.

Aside from typical marketing techniques, Ameren Illinois will need to foster the development of the design and building community to encourage market transformation of buildings within the service territory. Holding training events and information seminars will allow interactive learning opportunities for the building and design communities.

## Estimated Participation

| Installations | | | | |
|---|---|---|---|---|
| Measure | 2012 Installations | 2013 Installations | 2014 Installations | Total Installations |
| AC | 2 | 2 | 3 | **7** |
| Water Heaters | 1,112 | 1,217 | 1,270 | **3,599** |
| Furnace/Boiler | 2 | 2 | 2 | **6** |
| MISC Water Heating | 3 | 3 | 3 | **9** |
| Lighting Controls | 458 | 475 | 454 | **1,386** |
| Super T8's and T5 lighting | 13,041 | 11,268 | 11,300 | **35,609** |
| Building Shell Measures | 3 | 3 | 3 | **9** |
| Energy Management | 37 | 39 | 38 | **113** |
| Heat Pumps | 3 | 2 | 1 | **5** |
| Commercial Refrigeration | 16 | 18 | 17 | **51** |
| CFLs/LEDs | 9,178 | 6,141 | 4,666 | **19,985** |

## Estimated Budget

| Estimated Electric Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $867,233 | $838,880 | $827,851 | **$2,533,964** |
| Admin | $1,455,042 | $1,383,472 | $1,347,070 | **$4,185,585** |
| **Total** | **$2,322,275** | **$2,222,353** | **$2,174,921** | **$6,719,549** |

| Estimated Gas Budget | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| Incentive | $61,279 | $59,482 | $57,667 | **$178,427** |
| Admin | $100,708 | $97,928 | $94,676 | **$293,311** |
| **Total** | **$161,987** | **$157,409** | **$152,343** | **$471,738** |

## Savings Targets

| MWH Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross MWH** | 10,243 | 8,903 | 8,067 | **27,213** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.8** |
| **Net MWH** | 8,194 | 7,123 | 6,454 | **21,771** |

| Therm Savings | | | | |
|---|---|---|---|---|
| Year | 2012 | 2013 | 2014 | Total |
| **Gross Therms** | 64,354 | 62,544 | 58,914 | **185,811** |
| **Net-to-Gross** | 0.8 | 0.8 | 0.8 | **0.80** |
| **Net Therms** | 51,483 | 50,035 | 47,131 | **148,649** |

## Cost-effectiveness

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| BUS New Construction | **1.30** |

## 5.5 Residential and Business Demand-Response Program

With an eye toward reduced reliance on expensive peak power and increased system stability, the Ameren Illinois' demand-response program will acquire cost-effective demand-response capabilities from both Residential and Business customers. Following is a description of Ameren Illinois' proposed demand-response program. As noted previously in Plan 2, the program has been changed to a pilot program to reflect the requirements in the Order.

| PROGRAM | Voltage Optimization Pilot |
|---|---|
| Objective | Install Volt/VAR control on distribution system circuits enabling voltage reduction at the feeder level, thereby maintaining a flatter distribution circuit profile, ensuring customers are delivered an acceptable voltage at the end of the circuit while reducing demand and achieving additional kWh savings. |
| Target Market | Residential and Small Commercial customer loads. |
| Program Duration | June 2011 – May 2014 |
| Program Description | Effect the implementation of "Conservation Voltage Reduction" ("CVR") targeted at these customer classes to achieve MISO eligible Demand Response at times of system need. In addition, the CVR can be used at non-system critical periods to lower the power consumption of devices that are being operated on the system (typically on the order of 0.6%-1.0% reduction in kWh per 1% reduction in voltage).<br>The Optimization of Reactive Compensation will be realized by optimizing the distribution capacitor installation/controls to minimize energy losses associated with reactive current flow as well as increasing distribution line capacity. |
| Eligible Measures & Incentive Strategy | This optimization program will have multiple budgetary items that will accrue over several phases. These costs are best estimates at this time and may change during implementation due to scope, schedule, or other market factors as needed to deliver an effective demand response program. |

| | |
|---|---|
| **Implementation Strategy** | The Volt-Var Optimization program will be delivered in multiple phases. The roll-out will commence in the St. Louis Metro-east areas as the existing infrastructure has built-in capabilities to support the CVR scheme, allowing Ameren Illinois to quickly deliver demand reductions to customers. The phases are summarized below.<br><br>**Phase 1 Scope**<br>For phase 1 of the project, implement the existing voltage reduction scheme at the former Metro East substations. These stations are already designed with the ability to reduce substation LTC voltage values at 2.5%, 5.0%, or 7.5%.<br><br>Replace the existing radio controlled one-way capacitor banks with two way, smart, SCADA controlled capacitor banks, such that customer-delivered voltages can be monitored and incorporated into the CVR scheme.<br><br>When ADMS-VVO is implemented, then the complete distribution system will be managed by ADMS. This step is critical to overall project success, although Phase 1 can be implemented before VVO is functional.<br><br>**Phase 2 Scope**<br>The next opportunity for utilizing "low hanging fruit" in Ameren Illinois is to implement CVR in the former CILCO areas that were already equipped with SCADA at the distribution substation level as well as utilizing substation transformer LTC's rather than single phase feeder voltage regulators.<br><br>Volt-Var will be called no less than 8 times a year for 4 hours per event totaling 32 hours of demand reduction. |
| **Marketing Strategy** | The marketing strategy for the volt-var optimization program will be minimal. This program is not meant to be a head-line program but rather a "behind the scenes" type program that will deliver demand reduction with seemingly no detectable impact to households. Customers do not need to change behavior or upgrade equipment; however, due to the optimization equipment installed on Ameren's end, demand reductions will be felt by the system with customers acting as they always have. |

**Estimated Budget**

## Estimated Budget

| Capital Cost items | PY4 | PY5 | PY6 |
|---|---|---|---|
| IL Radio Infrastructure Installations | $ 350,000 | $ 350,000 | $ 350,000 |
| Convert capacitor banks: from Radio to Smart | $ 274,500 | $ 274,500 | $ 274,500 |
| LTC control modifications | $ 75,000 | $ 75,000 | $ 75,000 |
| Volt/Var Optimization (VV0) software license | | | |
| Distribution voltage regulator changeout | $ 58,500 | $ 58,500 | $ 58,500 |
| Total Capital Costs | $ 758,000 | $ 758,000 | $ 758,000 |
| Annualized Capital Cost (Over Equip Lifetime) | $ 264,356 | $ 264,356 | $ 264,356 |
| Operational Cost items | | | |
| Communications / Radio support | $ 175,000 | $ 175,000 | $ 175,000 |
| Engineering design, testing, and support | $ 200,000 | $ 200,000 | $ 200,000 |
| Maintenance / Troubleshooting | $ 300,000 | $ 300,000 | $ 300,000 |
| Implementation support costs (1FTE=120k) | $ 120,000 | $ 240,000 | $ 240,000 |
| Below-the-line Admin Costs (13%) | $ 137,716 | $ 153,316 | $ 153,316 |
| Annual Operational Cost | $ 932,716 | $ 1,068,316 | $ 1,068,316 |
| OUT-OF-POCKET TOTAL SPENDING | $ 1,690,716 | $ 1,826,316 | $ 1,826,316 |
| First-Year Cost ($/installed kW) | $ 376 | $ 406 | $ 406 |
| Levelized Cost ($/kW-year) | $ 93 | $ 101 | $ 101 |
| TOTAL SPEND W/ CAPITALIZATION | $ 1,197,073 | $ 1,332,673 | $ 1,332,673 |
| First-Year Cost ($/installed kW) | $ 266 | $ 296 | $ 296 |
| Levelized Cost ($/kW-year) | $ 66 | $ 74 | $ 74 |

**Savings Targets**

## MW Savings

| Year | 2012 | 2013 | 2014 | Total |
|---|---|---|---|---|
| **Gross MW** | 4.5 | 4.5 | 4.5 | **14** |
| **Net-to-Gross** | 1 | 1 | 1 | **1** |
| **Net MW** | 4.5 | 4.5 | 4.5 | **14** |

**Cost-effectiveness**

| Program Cost Effectiveness | |
|---|---|
| Measure | TRC |
| Volt-Var Conservation Voltage - EE | **1.12** |